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&lt;210&gt; 568

&lt;211&gt; 1606

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 568

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<212> DNA

<213> Homo sapiens

<400> 569

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<211> 1144

<212> DNA

<213> Homo sapiens

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<211> 2754

<212> DNA

<213> Homo sapiens

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<223> n equals a,t,g, or c

<400> 571

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<211> 2657

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (1285)

<223> n equals a,t,g, or c

<400> 572

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<211> 2352

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (2096)

<223> n equals a,t,g, or c

<400> 573

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<210> 574

<211> 328

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<400> 574

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<210> 575

<211> 1678

<212> DNA

<213> Homo sapiens

<400> 575

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<210> 576

<211> 2508

<212> DNA

<213> Homo sapiens

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<222> (2494)  
<223> n equals a,t,g, or c

<400> 576

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<210> 577

<211> 1531

<212> DNA

<213> Homo sapiens

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<222> (435)

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1531)

<223> n equals a,t,g, or c

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<210> 578

<211> 1244

<212> DNA

<213> Homo sapiens

<400> 578

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<210> 579  
<211> 2525  
<212> DNA  
<213> Homo sapiens

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<222> (22)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (76)  
<223> n equals a,t,g, or c

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<211> 4006

<212> DNA

<213> Homo sapiens

<400> 580

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&lt;210&gt; 581

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 581

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&lt;210&gt; 582

&lt;211&gt; 2528

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 582

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&lt;211&gt; 507

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<223> n equals a,t,g, or c

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<222> (8)  
<223> n equals a,t,g, or c

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<222> (21)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (1871)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1899)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1907)

<223> n equals a,t,g, or c

<400> 584

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1931

&lt;210&gt; 585

&lt;211&gt; 1020

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1006)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1018)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 585

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&lt;210&gt; 586

&lt;211&gt; 767

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (617)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 586

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&lt;210&gt; 587

&lt;211&gt; 847

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 587

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&lt;211&gt; 2158

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 588

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<211> 2299

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (342)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<400> 589

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tttgagcgca tggaactcca taaactaaca aattacataa actaaagggg gattttcttt 2160  
cttcttttgt ttggtagaaa attatccttt tctaaaaact gracmatggc acaacctctg 2220  
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<210> 590

<211> 2180

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1353)

<223> n equals a,t,g, or c

<400> 590

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cccgggccgt gcaaggcatg ctggactttg actatgtctg ctcccagac gagccctcag 180  
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tagatgtgct catcaacttt gcctctctcc gctctgccta tgacagcacc atggagacca 360  
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cgagaaagct gatcaagaag gcggaccaga agggagtgc catcatcgga cctgccactg 480  
ttggaggcat caagcctggg tgctttaaga ttggcaacac aggtgggatg ctggacaaca 540  
tcctggcctc caaactgtac cgcccaggca gcgtggccta tgtctcacgt tccggaggca 600  
tgtccaacga gctcaacaat atcatctctc ggaccacgga tggcgtctat gagggcggtg 660

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&lt;210&gt; 591

&lt;211&gt; 1193

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 591

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gctccactcc acccagtgtc acatcaaaga gccgggtgag ccggctggct ggtaggaaaa 180
caaatgaatc tgtgagttag ccccgaaaag gctttatgta ttccagaaac acaaatgaaa 240
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gaggaccact tttcagtcac ctgtcttctc aaacataga agaaagtgc tattttgatt 720
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<210> 592

<211> 2002

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1914)

<223> n equals a,t,g, or c

<400> 592

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tatggccaac agcaagatgc ataccaggga ccacctccac aacagggata tccaccccag 180  
cagcagcagt acccagggca gcaagggttac ccaggacagc agcagggcta cggtccttca 240  
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ggatatagac caacacagcc tggaccacca cagccacccc agcagaggcc ttatggatat 360  
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atctatttagc agccatattg tcacctcagc actgtggaca cctccctgtg aagagatcct 480  
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gcctttgttg tttagttata aaaggcttta gtagtcaaaa aatactcttg atttcacatt 600  
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taaatttgaa taagcagaac atactgttct caacatactg taatcaaaaag gggnaatttc 1920  
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<210> 593

<211> 1014

<212> DNA

<213> Homo sapiens

<400> 593

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<210> 594

<211> 333

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (242)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (292)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (328)

<223> n equals a,t,g, or c

<400> 594

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tcaccttcgc ctctgctgaa gtctccccgc agccctctcc acccagaggt ctccctatac 180
cgagaccac catccttcca tcctgaggac cgccccaacc ctccggagccc cccactcagt 240
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gcttccttaa ggaacctttc aaccaaancc ttc 333
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<210> 595

<211> 1120  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (29)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (40)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (585)  
<223> n equals a,t,g, or c

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atgcatccga gtttggaac ccacttaag ggatggagcc tgggggatca cattaacgg 180  
aaaatgccaa cgacttctac cacctctacg cgtttttagt ttttcatttt ctcgaaggaa 240  
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<210> 596  
<211> 532  
<212> DNA  
<213> Homo sapiens

<400> 596  
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ttgagtaatt ccattgcttt tgacaagtgt tctgtaccca tgccacgacc accacaatcg 180  
agagagaaca tcttcatcac tccagaaggg ctcctttgca gtgagtactc cctaggagtt 240  
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acaattttta aaaattaaat gatatgtatg gcttcttttg cttagcataa tgtttttgag 360  
cttattcatt tgttgcatat atcaatactt tgcttctttt taccacctgt acttcatttta 420  
tggatacgtt gtttatccat gtgtttatcc ccaatggaca ttgggttggt tctgattttt 480  
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<210> 597

<211> 1494

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1483)

<223> n equals a,t,g, or c

<400> 597

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aagggtacag ccggtgtcaa tggagagttc aaagacctaa gccttgatga ctttaagggg 180  
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tttctttgct gaagtattca ttgtaaaaca taaaaataa acatatttta aaacatttgc 1440  
attttaccac caaaaaaaaa aaaaaaaaaa cctcgggggg ggncccgggc ccca 1494

<210> 598

<211> 2188

<212> DNA

<213> Homo sapiens

<400> 598

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atgaggggtat atattcggag ygagcgcggg acscgatgag tggccgcgcg gaaggagctg 180

gagacggctcg tagctgcggt cgcgccgaga aagggtttaca ggtacatata ttacaccct 240  
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&lt;210&gt; 599

&lt;211&gt; 1273

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 599

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gagtttttta attgagaagt ttaattcaga agtttgtttt tgttgccctct gatttaacat 180  
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<210> 600

<211> 1239

<212> DNA

<213> Homo sapiens

<400> 600

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ggcgtgcaaa aactaacatt gaaattttga aacagcagca gagtgagtgg attttatatt 180
tcgttattgt tgggtggtta aaaaattccc cccatgtaat tattgtgaac accttgcttt 240
gtggtcactg taacatttgg ggggtgggac agggaggaaa agtaacaata gtccacatgt 300
ccctggcatc tgttcagagc agtgtgcaga atgtaatgct cttttgtaag aaacgtttta 360
tgatttttaa aataaattta gtgaacctat ttttggtggt catttttttt ttaagacagt 420
catttttaaa tgggtggctga atttcccaac ccaccccca actaaacact aagtttaatt 480
ttcagctcct ctgttggaca tataagtgc tctcttggtg gacataggca aaataacttg 540
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gcccctactt ttcaacaatt ttctatgta gttgtgaaga actaagggtg ggagcagtac 720
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<210> 601

<211> 1286

<212> DNA

<213> Homo sapiens

<400> 601

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gtgcgagcca ctgcgcctgg ctggttttca tgaatcttga tagacatcta taacgttatt 180
attttcagtg gtgtgcagca tttttgcttc atgagtatga cctaggtata gagatctgat 240
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```

aacttgaatt cagaatatta agaaaatgaa gtaactgatt ttctaaaaaa aaaaaaaaaa 300
aaaatttcta cattataact cacagcattg ttccattgca ggttttgcaa tgtttggggg 360
taaagacagt agaaaatatta ttcagtaaac aataatgtgt gaacttttaa gatggataat 420
agggcatgga ctgagtgtctg ctatcttgaa atgtgcacag gtacacttac cttttttttt 480
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aatgtcatgc gtcatacatg tgggtataaa gtacataaaa tatatctaac tattcataat 600
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caacaattct tagagatgct agctagtgtt gaagctaaaa atagctttat ttatgctgaa 780
ttgtgatttt tttatgccaa atttttttta gttctaatac ttgatgatag cttggaaata 840
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cggccgggta tttagtagta gtaggc                                     1286

```

<210> 602

<211> 404

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (399)

<223> n equals a,t,g, or c

<400> 602

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ggaggtgttt tgtctaacca tcaaaatggt tgagactttt ttttaaacad ttctgagttc 120
gaaggtaata ctgacagatt tcttccctct tccctcccca tcaccacact cagtgataac 180
acattactga tagaggaagt cattagaatc atttttaagt ttcagatata ggagacttca 240
tgcaatttgg agataagact aatttattgg ggttttcctt ggattttttt ttttaataact 300
gggggctatt ttatcagctt gcctattaaa ggactatggt aagtatagaa tcttaatggt 360
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<210> 603

<211> 1168

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1121)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1122)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1133)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1153)

<223> n equals a,t,g, or c

<400> 603

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ccccaggctc agttcaaact tgtattggtt ggtgatggtg gtactggaaa aacgaccttc 180
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gttcaccccc tagtggtcca caccaacaga ggacctatta agttcaatgt atgggacaca 300
gccggccagg agaaattcgg tggactgaga gatggctatt atatccaagc ccagtgtgcc 360
atcataatgt ttgatgtaac atcgagagtt acttacaaga atgtgcctaa ctggcataga 420
gatctggtac gagtgtgtga aaacatcccc atttgttgtt gtggcaacaa agtggatatt 480
aaggacagga aagtgaaggc gaaatccatt gtcttccacc gaaagaagaa tcttcagtac 540
tacgacatct ctgccaaaag taactacaac tttgaaaagc ccttcctctg gcttgctagg 600
aagctcattg gagaccctaa cttggaatct gttgccatgc ctgctctcgc cccaccagaa 660
gttgtcatgg acccagcttt ggcagcacag tatgagcacg acttagaggt tgctcagaca 720
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gtctagtttt ataggcagct gtctgtgat gtcagcgggt cagcgtgtgt gccacctcat 840
tattatctag ctaagcggaa catgtgcttc atctgtggga tgctgaagga gatgagtggg 900
cttcggagtg aatgtggcag tttaaaaaat aacttcattg tttggacctg catatttagc 960
tgttttggaa cgcagttgat tccttgagtt tcatatataa gactgctgca gtcacatcac 1020
aatattcagt ggtgaaatct tgtttgttac tgtcattccc attccttttc gtttagaatc 1080
agaataaagt tgtatttcaa atatctaaaa aaaaaaaaaa nngggggggs cgnccattcc 1140
ccaaaggggg gtntaaaacc gggggggt 1168
```

<210> 604

<211> 458

<212> DNA

<213> Homo sapiens

<400> 604

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ccatcttcgg ctaggctcgc acaggctccg gctcatggca tcaagtggca tccatcataa 120
gatcgtaaac tgaagacaat atgcaaaatt ctacatgga tgaatacaga aattctagta 180
atggcagcac aggaacagct tcagaggtag tggtagaaca tcctactgat ttcagtactg 240
agattatgaa cgttacagaa atggaacagt cacctgatga ctctcccaat gtgaatgcat 300
ctacagaaga aactgaaatg gcaagtgtg tggaccttcc agtgacgctg acagaaacag 360
aagcaatttc cctccagaat atgaaaaatt ttggaaaact gtagaaaata atcctcaggt 420
tttaaaggct gggatatatt gcctcaatat gtagaaca 458
```

<210> 605

<211> 911

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (897)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (904)

<223> n equals a,t,g, or c

<400> 605

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ggaagcttcc gcagagccgg ccgggctttc ccagtcctcc gtggggacca gcattagcag 180
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ccagcctttt ggacagtatc ttttggatgg cagctcccaa aaatagacgc accattgaag 300
ttaaccgggtg taggagaaga aatccgcaga agcttattaa agttaagaac aacatagacg 360
tttgtcctga atgtggtcac ctgaaacaga aacatgtcct ttgtgcctac tgctatgaaa 420
aggtgtgcaa ggagactgca gaaatcagac gacagatagg gaagcaagaa gggggccctt 480
ttaaggctcc caccatagag actgtggtgc tgtacacagg agagacaccg tctgaacaag 540
atcagggcaa gaggatcatt gaacgagaca gaaagcgacc atcctgggtc acccagaatt 600
gacaccaaag atgttaaaag gataacttca cagtaaatca tttctcctga aatagaggaa 660
gattcttttac gttgttgtgc ttgtttttaa atcatcagta tagtttaaca cattctttct 720
aagcagtttt gtgtgggata atttgaagaa tatattatga gtaaaactccg aaaattttgt 780
ttatccaaag gctcaatgga ttatgtttct attatataca aggttttaag taaacataaa 840
atttccagaa caaaaataaa aaatttaaaa ttcataagcaa aaaaaaaaaa aaggggnggc 900
cgcncatagg g 911
```

<210> 606

<211> 738

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (730)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (737)

<223> n equals a,t,g, or c

<400> 606

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ggggccatga gcgcgcgccg gccccagttc agcattgatg atgccttcga gctgtccctg 120
gaggacgggg gccctgggccc cgagtccagc ggggtcgcgc gctttggggc gctgcacttc 180
gagcgtcggg cccggttcga ggtggctgac gaggacaagc agtcccggct gcgctaccag 240
```

```
aacctggaga acgatgagga tggagcccag gcctctccgg agccggatgg gggagtcggc 300
accagggttag ggccagggat tccagccgaa cttccaccgg ggcttccagt tcttctacct 360
gccctacttc gagaagtgat cgcggcgcag cgtggacccc ttgcgcccac gggggcgccc 420
ctcttgccct gttccgttcc cctcatctca agggaaagagg ccctccagga ccctcgaaac 480
cccagcccct agggagtttg ctcaggaagt tcggggcatg caggcctggc cctgggaaag 540
ccgcccgtcg cctgctctgt gccttaactt attctcgggc cgtgcggctg ctaggttgct 600
gttattttgt gctaataaaa gagtaattaa ttccaaaaaa aaaaaaaaaa aaaaaaaaaa 660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagggcgg ccgtttttaa 720
ggatccaagn ttacgtnc 738
```

<210> 607

<211> 1348

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1328)

<223> n equals a,t,g, or c

<400> 607

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gtcagcatga aagccttcag tcccgtgagg tccgttagga aaaacagcct gtcggaccac 180
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gtgagcaaga tggaaatcct gcagcacgtc atcgactaca tcttggacct gcagatcgcc 360
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gttcatgatt tctttttattc tttgcacaac aacaacaaca acaaattcac ggaatctttt 600
aagtgtgtaa cttatttttc aaccatttca caaggaggac aagttgaatg gaccttttta 660
aaaagaaaaa aaaaatggaa ggaaaactaa gaatgatcat cttcccaggg tgttctctta 720
cttggactgt gatattcggt atttatgaaa aagactttta aatgcccttt ctgcagttgg 780
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taatgatgta cttattcatg ctaaaactttt tataaaagtt tagttgtaaa cttaaccttt 1140
ttatacaaaa taaatcaagt gtgtttattg aatgggtgatt gcctgcttta tttcagagga 1200
ccagtgtctt gattttttatt atgctatgtt ataactgaac ccaaataaat acaagttcaa 1260
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aaaaattnct cggccgacaa ggggaattc 1348
```

<210> 608

<211> 722

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature  
<222> (690)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (703)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (718)  
<223> n equals a,t,g, or c

<400> 608  
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gtcagtcgac ataagccctg tggatatggc cttatgtaca ctgtaatgca gacagggtgct 120  
tttcatcatt catgtaacat tctcacacag ttgaggrtat tcatctcctc accaattcca 180  
gattgtraat gtacywtctt aaacaactct tgaggtcacc aaacagtagt tatttgactg 240  
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tatggaaaac tgattctggg aggaagcaga aatgtcccta gataacagca tgtattgcag 420  
ataccctaat gtttattggt ttctcagccc ttcaattttg cttttctctc tcaaagtcta 480  
cagactcaat ttaaattctta cctttgattg ttgaaaaaag tcaactaagat gtgaatacag 540  
aatagacatt gagagggttat atatgtccaa aactcatctg tccagcagtc accgtcctct 600  
tcagagtggg caggttgggc agrtgggcac aggtgctggg gatgcccctc ckgggcaaaa 660  
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ac 722

<210> 609  
<211> 330  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (315)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (321)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (330)  
<223> n equals a,t,g, or c

<400> 609  
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cctaacaata cagcacaagc agcttctcat ggcattaaga attgtttgta catgtaattt 120
tgaatggctg tatgctgttt catcttaaga atataccata attctaattt ttcataatta 180
taatagcact gtgacgaaca tccttcttaa caaaattctt tgtctgcacc tatggttatt 240
ttctaaggta grttattaga atttgaaatg ccttgcacaa gggacagtaa ctttttcacc 300
cttagttttc agggnggacc ngttgtctcn 330

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&lt;210&gt; 610

&lt;211&gt; 1866

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 610

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ggcctcccaa agtgttgaga ttacaggtgt gagccaccat gctcgctgag agcagatatt 60
tgaaatgtca ctttgagttc tgagaaaaag taaaaagcca gaagacatac tagatatata 120
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&lt;210&gt; 611

&lt;211&gt; 2176

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

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<222> (2162)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
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<223> n equals a,t,g, or c

<220>  
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2176

&lt;210&gt; 612

&lt;211&gt; 3619

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (12)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (22)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 612

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<211> 1427

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (297)

<223> n equals a,t,g, or c

<400> 613

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<210> 614

<211> 1433

<212> DNA

<213> Homo sapiens

<400> 614

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<211> 506

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<400> 615

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<210> 616

<211> 2174

<212> DNA

<213> Homo sapiens

<400> 616

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<210> 617

<211> 3147

<212> DNA

<213> Homo sapiens

<400> 617

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&lt;210&gt; 618

&lt;211&gt; 2529

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 618

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<210> 619

<211> 551

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<400> 619

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<210> 620

<211> 1735

<212> DNA

<213> Homo sapiens

<400> 620

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<210> 621

<211> 1026

<212> DNA

<213> Homo sapiens

<400> 621

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<210> 622

<211> 670

<212> DNA



<213> Homo sapiens

<220>

<221> misc feature

<222> (598)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (645)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (649)

<223> n equals a,t,g, or c

<400> 622'

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<210> 623

<211> 2163

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<400> 623

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2163

&lt;210&gt; 624

&lt;211&gt; 601

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (562)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (566)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (600)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 624

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caaatggggg gagatggcat anaganaact aaggattctg gaaaggttgg attaaggggn 600  
g 601

<210> 625

<211> 593

<212> DNA

<213> Homo sapiens

<400> 625

gatgcagttt gcttggcaga gctataagcg ttatgcaatg gggaaaaacg aactccgtcc 60  
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tgactccctc gataccctct acctcatgga gctgaaggag gagttccagg aggccaaggc 180  
ctgggtggga gagagcttcc acctgaacgt gagcggagaa gcaccccttg ttgaggtgaa 240  
catccgctac atcgggggac tcctctcagc cttctacctg acaggagaag aggtgttccg 300  
aataaaggcc atcaggctgg gagagaagct cctgccggcg ttcaacaccc ccacgggaat 360  
cccaaagggc gtggtgagct tcaaaagtgg gaactggggc tgggccacag ccggcagcag 420  
cagcatcttg gcggagtttg gatccctgca cttggaattc ttacacctca ctgaactctc 480  
tggcaaccag gtcttcgctg aaaaggtcag gaacatccgc aaggtcctca ggaagwtcga 540  
aaagcccttt ggccctytact ccaactkagm catggtgttg caaacagatc ccc 593

<210> 626

<211> 2272

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2267)

<223> n equals a,t,g, or c

<400> 626

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ggactcgcgt cgcggccgcg gagacgtgaa gctctcgagg ctccctccgc tgccgggtcgg 120  
cgctcgccct cgctctctc gccctccgcc ccggccccgg ccccgccgcc gccatggaga 180  
agactgagct gatccagaag gccaaagtgg ccgagcaggc cgagcgctac gacgacatgg 240  
ccacctgcat gaaggcagtg accgagcagg gcgcccagct gtccaacgag gagcgcaacc 300  
tgctctccgt ggcctacaag aacgtggtcg ggggccgcag tccgcctgga gggatcatctc 360  
tagcatcgag cagaagaccg acacctccga caagaagttg cagctgatta aggactatcg 420  
ggagaaagtg gagtccgagc tgagatccat ctgcaccacg gtgctggaat tgttgataa 480  
atatttaata gccaatgcaa ctaatccaga gagtaaggtc ttctatctga aaatgaaggg 540  
tgattacttc cggtaccttg ctgaagttgc gtgtggtgat gatcgaaaac aaacgataga 600  
taattcccaa ggagcttacc aagaggcatt tgatataagc aagaaagaga tgcaaccac 660  
acaccaatc cgccctggggc ttgctcttaa cttttctgta ttttactatg agattcttaa 720

taaccagag cttgcctgca cgctggctaa aacggctttt gatgaggcca ttgctgaact 780  
tgatacactg aatgaagact catacaaaga cagcaccctc atcatgcagt tgcttagaga 840  
caacctaaca ctttggacat cagacagtgc aggagaagaa tgtgatgcgg cagaaggggc 900  
tgaaaaactaa atccatacag ggtgtcatcc ttctttcctt caagaaacct ttttacacat 960  
ctccattcct tattccactt ggatttccta tagcaaagaa acccattcat gtgtatggaa 1020  
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gccttgtgaa aatgttatgc cctatgtaac agcagagtaa cataaaataa aagtacattt 1920  
tataaacat ttactatggc tttgtaacaa ttgcataccc atattttaag ggacaggtga 1980  
atttactact ttctaaagtt tattgatact tcccttttat gtaaaatgta gtagtgatac 2040  
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attggactgc atttcttaga gtgttttact atagatcagt ctcatgggcc atctcttcct 2160  
cagatgtaaa tgatatctgg ttaagtgtta tatggaataa agtggacatt ttaaaactar 2220  
maaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaanaaa ta 2272

<210> 627

<211> 871

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (863)

<223> n equals a,t,g, or c

<400> 627

gggagcggag gncaggaacc caataagctg cttgcctcgc gagctgaagc ccgtactcaa 60  
gatggcggct ccgggcgggc gtggccagtgc actagaaggc gaggcgccgc gggaccatgg 120  
cggcggcggc ggacgagcgg agtccagagg acggagaaga cgaggaaagag gaggagcagt 180  
tggttctggt ggaattatca ggaattattg attcaractt cctctcaaaa tgtgaaaata 240  
aatgcaaggt tttgggcatt gacactgaga ggcccattct gcaagtggac agctggtgtc 300  
ttgctgggga gtatgaagac actctagggg cctgtgttat atttgaagaa aatggtgaac 360  
atgctgatac agaaggcaat aataaaacag tgctaaaata taaatgccat acaatgaaga 420  
agctcagcat gacaagaact ctctgacagc agaagaagga aggagaagaa aacataggtg 480

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gggtggaatg gctgcaaata aaggataatg atttctccta tcgacccaac atgatttgta 540
actttctaca tgaaaatgaa gacgaagaag tggtagcttc agccccagat aaatctttgg 600
aattggaaga ggaagagatt caaatgaacg acagttcaaa cctgagttgt gaacaggaga 660
aaccaatgca cttggaaata gaagattctg gtcctcttat tgatatacct tctgagacag 720
aaggttctgt ttttatggaa actcaaatgc tgccttagaa atcactccta gatgaaatgt 780
ttctcataat aacttgtcaa gaacttttta gagttgttac ataaaaataa ttgctgtgta 840
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa t 871
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<210> 628

<211> 779

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (23)

<223> n equals a,t,g, or c

<400> 628

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tgttgagtgt tcgggacgcc ggccctgcagg cgccatggtc ttcctcaccg cgcagctctg 120
gctgcggaat cgcgtcaccg accgctactt tcggatccag gaggtgctga agcacgccag 180
gcacttccgg ggaaggaaaa atcgctgcta caggttggcg gtcagaaccg tgattcgagc 240
ctttgtgaaa tgcaccaaag cccgatacct gaagaaaaag aacatgagga ccctctggat 300
taatcgaatt acagctgcta gccaggaaca tggactgaag tatccagcgc tcattgggaa 360
tttagttaag tgccagggtg agctcaacag gaaagtccta gcggatctgg ccatctacga 420
gccaaagact ttcaaatctt tggctgcctt ggccagtagg aggcgacacg aaggatttgc 480
tgctgccttg ggggatggga aggaacctga aggcattttt tccagagtgg tgcagtacca 540
ctgaggactg ttgctgtatt gattaggaaa agagacagag taatttgagc tttgtttgat 600
ttatactttt gtttatctac aacccaataa cagacatgag ggatggccct gtctctctgg 660
gacagagcct cacagatgat gtccatgttt tgtgtgaatg aaactcaaac actcttcaaa 720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 779
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<210> 629

<211> 1835

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1835)

<223> n equals a,t,g, or c

<400> 629

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gtcgccatgg ctgagctgca gcagctccgg gtgcaggagg cggtggagtc catggtgaag 120
agtctggaaa gagagaacat ccggaagatg cagggtctca tgttccggtg cagcgcacag 180
tgttgtgagg acagccaggc ctccatgaag cagggtgcacc agtgcatcga gcgctgccat 240
gtgcctctgg ctcaagccca ggctttggtc accagtgagc tggagaagtt ccaggaccgc 300
ctggcccggg gcaccatgca ttgcaaygac aaagccaaag attcaataga tgctgggagt 360
aaggagcttc aggtgaagca gcagctggac agttgtgtga ccaagtgtgt ggatgaccac 420
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atgcacctca tcccaactat gaccaagaag atgaaggagg ctctcttata aattggaaaa 480
taaaagtatt tgccagtggc catcagggct gagggcaaga atatatatttt tataaggaat 540
tggaattttt agtcttttaa gcaaagttta cgaatgaaga aatgaaggat ggccacaagc 600
gtaaggcata tgtcacttgc ctctggacac tggttatttt atgtttcagt ccctaaaaaa 660
tgaaatggaa aaaagtgggtg ctaaatcgag tcagagatat tacaggagag ttttagagct 720
tattattttc tgtggccagt gcttgctctg gcagtaaggc tytcccctgt aacaagccag 780
agccctccaa ggtaccagac tcttcttact acacagggtac taacaggctg gcagggtaga 840
gttggtggag tctgaggaga gatattttct ctttggtgcc aacatcctgt ttacaaaaag 900
tgtcacccca ccatcttcca taagctgtga aacaaaatca atgaggtcac taacttagaa 960
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acaagttgat tttaagatgt ggaactggga ggtagactag tttggataag aactttgaaa 1080
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aatgaagtac tggatttggg aaaacctggg tttattagaa catatggaat gaaagcctac 1440
acctagcatt gcctacttag cccctgaat taacagagcc caattgagac aaaccctgg 1500
caacaggaaa ttcaaggagg aaaaagtaag caacttgggc taggatgagc tgactccctt 1560
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tggcagtgtt cctgccccag catggcacct tattgttttg atagcaactt cgttgaaatt 1680
tcaccaactt attacttgaa attataatat agcctgtccg tttgctgttt ccaggctgtg 1740
atatattttc ctagtggttt gactttaaaa ataaataagg ttttaattttc tccccaaaaa 1800
aaaaaaaaa aaaaaaaaaa aaaaataaaa aaatn 1835

```

<210> 630

<211> 1097

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<400> 630

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gagctaagat gactaatttg atgattttcg atctcttttc ccctgtcctg attttaaaag 120
ccccctcctt tttttttttt tttttttttt ctttttttag gcatatgtag taatattaga 180
aacatttaaat ttgggaaact ttgattcttg aaagagaaaa caaaagcatg tgaataaaact 240
ttgaagtgtt cacctcagtt tgggacccaa ctgcttggtat ctttgtaaaa accggttttg 300
tatgtcaagg aggagttaa ggcccttccg accaccttgt gttccccctt tctgcgcasc 360
atgtatcacg tggagtgtct ccttaccaca cctcacgtgc ccctgagccc tatttcctga 420
tttcttcttg gctggacttc cccgttctcc accagcagct ccagtatccc aaactttcta 480
gtcctgctga tcctcccagc aacgggggtg aaactggagg gcagtgtctg gtctgttttc 540
taagaaactt atgaattcta ttatctttac aaatatgaga aaattttttc aatatttttt 600
attaatcttt ttataaaatg aaaagaaact cctatgatcg attaaggaag gtggttatgg 660
ctgggtgggt caggggtttt ttgggttttc tttttttttt ctttgccttc ttaaccttaa 720
gctgttttaag ttgaagcatt ctcatgtgtt tggggggaaa catcctctta aaatgggtcc 780
ttgtgcttgc cttctgggga ggcggtcctg agcaggtgaa tcataaggca tttatgcata 840
tgttatatgc ggactgcacc cacctctccc cccagcctt tgccctcttg gttgttgtgc 900

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tgctttcccc ttactttgct acattttctat agttaagttg gttttacttg aatgattcat 960  
gtttaggggg aaaatgaaaa tctcccttaa aatttgtttc aactcctcct gcaaataaaa 1020  
taaatagaagt ggcagatgta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1080  
aaaaaaaaaa aaaaaaa 1097

<210> 631

<211> 1537

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<400> 631

cagtnaccgg tccggaattc ccgggtcgac ccacgcgtcg cacggggaaa aggtggctct 60  
ggccgggggtg gctcggtttc ctggggctat gtaactgagc tcgtcgactt aggggtcctt 120  
cttcgctgcc ctcgccgctg gctagcaggg agtttccgct cgggagagag actgtcctca 180  
cgcccgcgtgc gcctcctcga cggcagagca ggcttgctcg cccgtgggag cgtcccggcc 240  
gagaagccct gaggggggag gggaggccat tttgtcccga ccgactcccc ggaaccgggc 300  
ggagcggctg ggagaggctg cggagccgag gtcgccgccc tcggaggcac tggacgccgc 360  
cactgtcggg gcttcctcaa agctgttcgt aggtcgcccc cgccgtctcg agcctttttc 420  
ccacgcttcc ccggtcctcc ggcccgagaa cgcccagagt aggagttggc cgtagtgaga 480  
gggaccgatc ccttgggggc gccggcgccg agagcccag cgcctcctcc caatggcgaa 540  
gaagacgtac gacctgcttt tcaagctgct cctgatcggg gattccggag tggggaagac 600  
ctgcgtcctt tttcgttttt cggatgatgc cttcaatact acctttattt ccaccatagg 660  
aatagacttc aagatcaaaa cagttgaatt acaaggaaag aagatcaagc tacagatatg 720  
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gtgtgatatg gacgacaaaa gagttgtacc taaaggaaaa ggagaacaga ttgcaaggga 960  
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cctcacgtta gctgaagata tccttcgaaa gaccctgtga aaagagccca acagtgaaaa 1080  
tgtagatatc agcagtggag gaggcgtgac aggctggaag agcaaatgct gctgagcatt 1140  
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aacaataaaa tgtatagaaa aatcatgtct gtgaactcat ttttaaatgt acttgctcag 1380  
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aaaaaaaaaa actcgagggg gggcccggt acccaac 1537

<210> 632

<211> 1901

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1566)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1894)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1899)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1900)

<223> n equals a,t,g, or c

<400> 632

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ggcatccagt ttagcaacak cagagatgac gactctgcga ttctgagagt ccctggcgag 60
ccggggctag cgaaaagtgg gggcagaacg aactacatct cccatcgtgc caggaggcgg 120
tcccgcccgt tccccctgg gagttgtagt ctaaccccct cggatccaac agcaacctca 180
gtgctgaac tctgttatcc agaaggcctc gccctgccgc cgccgaagct ggaattcgtc 240
ggctagtagt tctcgccggc aactagagga acctgttggc gtggcccaga aggcttagcg 300
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acaacgatgt gaaactggac ttcaaggatg tccttttgag gcccacgc agtaccctta 420
agtctcgaag tgagggtgat ctcaagatg ccttttcatt tcggaactca aagcagacat 480
actctggggg tcccatcatt gctgccaata tggatactgt gggcaccttt gagatggcca 540
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tacggaagcg cttccccag cacaccatca tggcaggga tgtggaaca ggagagatgg 840
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aaaaaaaaa aaaaaggggg gccgctttaa agnccaann t 1901
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<210> 633  
<211> 1750  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (809)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (821)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1676)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1689)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1712)  
<223> n equals a,t,g, or c

<400> 633  
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atccagactc ggaaccggaa gatgtccaac aagtccaaga agagcaagaa aggggcggag 180  
tgcttcgagg agctgtcaaa gtgcatgcag gagaagtcac ccccttcag tgcagctgcc 240  
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ctgcccactc cgacgcccac ccaccctctc tccagcctct ccttcggcca cccccacccg 360  
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<210> 634

<211> 1926

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<400> 634

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<211> 1346

<212> DNA

<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (21)

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<220>

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<222> (1342)

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<210> 636

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 636

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&lt;210&gt; 637

&lt;211&gt; 1663

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 637

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<210> 638

<211> 3947

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (625)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3738)

<223> n equals a,t,g, or c

<400> 638

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&lt;210&gt; 639

&lt;211&gt; 1427

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

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<222> (12)

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<222> (29)

<223> n equals a,t,g, or c

<400> 639

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<211> 920

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (910)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (919)

<223> n equals a,t,g, or c

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aacagtctca tctaccacag caagaaagcc agtcacaaga gctgctaag aaaacggaac 840
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<210> 641

<211> 1706

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1704)

<223> n equals a,t,g, or c

<400> 641

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tcagaacaca tcaacgaggg ggagacggcc atgctggtct gcaagtcaga gtccgtgcca 480
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```
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aaaaaaaaaa aaaaamgggg ggggncc 1706
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<210> 642

<211> 2170

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (406)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (811)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2150)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2154)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2155)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2170)

<223> n equals a,t,g, or c

<400> 642

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ccaacgggtt cagattggtt caacttagca atcaaagaca tcccagaggt tacacatgaa 180
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2170

<210> 643

<211> 1712

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1664)

<223> n equals a,t,g, or c

<400> 643

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aacattgagt tcaagcccga atctcgagtg aatggtctag atgaaagcaa aatcaaagat 180
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gcattcagtt tccgaacagt tgaggccaaa caggagaaaag tttcaactac actgaatgtg 300
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ggttggaagg ctgaaaaaat tctgcgggaa ctgaagcatc aaaagcgctg taaggaagca 1620
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```

<210> 644

<211> 1793

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (790)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1731)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1793).

<223> n equals a,t,g, or c

<400> 644

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<210> 645

<211> 2679

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature  
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<223> n equals a,t,g, or c

<220>  
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<222> (24)  
<223> n equals a,t,g, or c

<220>  
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<222> (41)  
<223> n equals a,t,g, or c

<220>  
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<222> (124)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (128)  
<223> n equals a,t,g, or c

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tgantccnaa ascaaaccatg acctgtcttg tgtaacarcc cagcagcgga cagagctccc 180  
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<210> 646

<211> 832

<212> DNA

<213> Homo sapiens

<400> 646

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aataaaaaata tttcagtagt ctttgcacat gcttaccttg taccagaaac atttccaatt 180  
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<210> 647

<211> 1325

<212> DNA

<213> Homo sapiens

<400> 647

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1325

&lt;210&gt; 648

&lt;211&gt; 606

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (572)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 648

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606

&lt;210&gt; 649

&lt;211&gt; 1696

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1047)

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<400> 649

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1696

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<211> 3059

<212> DNA

<213> Homo sapiens

<400> 650

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<212> DNA

<213> Homo sapiens

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<211> 1997

<212> DNA

<213> Homo sapiens

<400> 655

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<210> 656

<211> 1597

<212> DNA

<213> Homo sapiens

<400> 656

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<210> 657

<211> 372

<212> DNA

<213> Homo sapiens

<400> 657

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<210> 658

<211> 1226

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (378)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1220)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1226)

<223> n equals a,t,g, or c

<400> 658

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<210> 659

<211> 464

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (25)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<400> 659

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ccaacgagac cctctttttt tgggaaatta ccaaacaaga tttt 464

<210> 660

<211> 2549

<212> DNA

<213> Homo sapiens

<400> 660

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<210> 661

<211> 1162

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1155)

<223> n equals a,t,g, or c

<400> 661

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<210> 662

<211> 1178

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (978)

<223> n equals a,t,g, or c

<400> 662

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<210> 663  
<211> 740  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (25)  
<223> n equals a,t,g, or c

<220>  
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<222> (546)  
<223> n equals a,t,g, or c

<220>  
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<222> (618)  
<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
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<222> (652)  
<223> n equals a,t,g, or c

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<210> 664  
<211> 1670  
<212> DNA  
<213> Homo sapiens

<400> 664

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Phosphatase (1:5,000 dilution, referred to herein as the working dilution) are added to each well and incubated at 37°C for 30 min. Wells are washed three times with PBS(+Ca,Mg)+0.5% BSA. Dissolve 1 tablet of p-Nitrophenol Phosphate pNPP per 5 ml of glycine buffer (pH 10.4). 100 µl of pNPP substrate in glycine buffer is added to each test well. Standard wells in triplicate are prepared from the working dilution of the ExtrAvidin-Alkaline Phosphatase in glycine buffer: 1:5,000 ( $10^0$ ) >  $10^{-0.5}$  >  $10^{-1}$  >  $10^{-1.5}$ . 5 µl of each dilution is added to triplicate wells and the resulting AP content in each well is 5.50 ng, 1.74 ng, 0.55 ng, 0.18 ng. 100 µl of pNPP reagent is then added to each of the standard wells. The plate is incubated at 37°C for 4h. A volume of 50 µl of 3M NaOH is added to all wells. The plate is read on a plate reader at 405 nm using the background subtraction option on blank wells filled with glycine buffer only. Additionally, the template is set up to indicate the concentration of AP-conjugate in each standard well [ 5.50 ng; 1.74 ng; 0.55 ng; 0.18 ng]. Results are indicated as amount of bound AP-conjugate in each sample.

*Example 46: Alamar Blue Endothelial Cells Proliferation Assay*

This assay may be used to quantitatively determine protein mediated inhibition of bFGF-induced proliferation of Bovine Lymphatic Endothelial Cells (LECs), Bovine Aortic Endothelial Cells (BAECs) or Human Microvascular Uterine Myometrial Cells (UTMECs). This assay incorporates a fluorometric growth indicator based on detection of metabolic activity. A standard Alamar Blue Proliferation Assay is prepared in EGM-2MV with 10 ng /ml of bFGF added as a source of endothelial cell stimulation. This assay may be used with a variety of endothelial cells with slight changes in growth medium and cell concentration. Dilutions of the protein batches to be tested are diluted as appropriate. Serum-free medium (GIBCO SFM) without bFGF is used as a non-stimulated control and Angiostatin or TSP-1 are included as a known inhibitory controls.

Briefly, LEC, BAECs or UTMECs are seeded in growth media at a density of 5000 to 2000 cells/well in a 96 well plate and placed at 37-C overnight. After the

overnight incubation of the cells. the growth media is removed and replaced with GIBCO EC-SFM. The cells are treated with the appropriate dilutions of the protein of interest or control protein sample(s) (prepared in SFM ) in triplicate wells with additional bFGF to a concentration of 10 ng/ ml. Once the cells have been treated with the samples, the plate(s) is/are placed back in the 37° C incubator for three days. After three days 10 ml of stock alamar blue (Biosource Cat# DAL1100) is added to each well and the plate(s) is/are placed back in the 37°C incubator for four hours. The plate(s) are then read at 530nm excitation and 590nm emission using the CytoFluor fluorescence reader. Direct output is recorded in relative fluorescence units.

Alamar blue is an oxidation-reduction indicator that both fluoresces and changes color in response to chemical reduction of growth medium resulting from cell growth. As cells grow in culture, innate metabolic activity results in a chemical reduction of the immediate surrounding environment. Reduction related to growth causes the indicator to change from oxidized (non-fluorescent blue) form to reduced (fluorescent red) form. i.e. stimulated proliferation will produce a stronger signal and inhibited proliferation will produce a weaker signal and the total signal is proportional to the total number of cells as well as their metabolic activity. The background level of activity is observed with the starvation medium alone. This is compared to the output observed from the positive control samples (bFGF in growth medium) and protein dilutions.

*Example 47: Detection of Inhibition of a Mixed Lymphocyte Reaction*

This assay can be used to detect and evaluate inhibition of a Mixed Lymphocyte Reaction (MLR) by gene products (e.g., isolated polypeptides). Inhibition of a MLR may be due to a direct effect on cell proliferation and viability, modulation of costimulatory molecules on interacting cells, modulation of adhesiveness between lymphocytes and accessory cells, or modulation of cytokine production by accessory cells. Multiple cells may be targeted by these polypeptides



since the peripheral blood mononuclear fraction used in this assay includes T, B and natural killer lymphocytes, as well as monocytes and dendritic cells.

Polypeptides of interest found to inhibit the MLR may find application in diseases associated with lymphocyte and monocyte activation or proliferation. These include, but are not limited to, diseases such as asthma, arthritis, diabetes, inflammatory skin conditions, psoriasis, eczema, systemic lupus erythematosus, multiple sclerosis, glomerulonephritis, inflammatory bowel disease, crohn's disease, ulcerative colitis, arteriosclerosis, cirrhosis, graft vs. host disease, host vs. graft disease, hepatitis, leukemia and lymphoma.

Briefly, PBMCs from human donors are purified by density gradient centrifugation using Lymphocyte Separation Medium (LSM<sup>®</sup>, density 1.0770 g/ml, Organon Teknika Corporation, West Chester, PA). PBMCs from two donors are adjusted to  $2 \times 10^6$  cells/ml in RPMI-1640 (Life Technologies, Grand Island, NY) supplemented with 10% FCS and 2 mM glutamine. PBMCs from a third donor is adjusted to  $2 \times 10^5$  cells/ml. Fifty microliters of PBMCs from each donor is added to wells of a 96-well round bottom microtiter plate. Dilutions of test materials (50  $\mu$ l) is added in triplicate to microtiter wells. Test samples (of the protein of interest) are added for final dilution of 1:4; rhIL-2 (R&D Systems, Minneapolis, MN, catalog number 202-IL) is added to a final concentration of 1  $\mu$ g/ml; anti-CD4 mAb (R&D Systems, clone 34930.11, catalog number MAB379) is added to a final concentration of 10  $\mu$ g/ml. Cells are cultured for 7-8 days at 37°C in 5% CO<sub>2</sub>, and 1  $\mu$ C of [<sup>3</sup>H] thymidine is added to wells for the last 16 hrs of culture. Cells are harvested and thymidine incorporation determined using a Packard TopCount. Data is expressed as the mean and standard deviation of triplicate determinations.

Samples of the protein of interest are screened in separate experiments and compared to the negative control treatment, anti-CD4 mAb, which inhibits proliferation of lymphocytes and the positive control treatment, IL-2 (either as recombinant material or supernatant), which enhances proliferation of lymphocytes.

One skilled in the art could easily modify the exemplified studies to test the activity of polynucleotides (e.g., gene therapy), antibodies, agonists, and/or

antagonists and fragments and variants thereof.

It will be clear that the invention may be practiced otherwise than as particularly described in the foregoing description and examples. Numerous modifications and variations of the present invention are possible in light of the above teachings and, therefore, are within the scope of the appended claims.

The entire disclosure of each document cited (including patents, patent applications, journal articles, abstracts, laboratory manuals, books, or other disclosures) in the Background of the Invention, Detailed Description, and Examples is hereby incorporated herein by reference. Further, the hard copy of the sequence listing submitted herewith and the corresponding computer readable form are both incorporated herein by reference in their entireties. Moreover, the hard copy of and the corresponding computer readable form of the Sequence Listing of Serial No. 60/124,270 are also incorporated herein by reference in their entireties.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> . line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209059
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g. "Accession Number of Deposit")	

<input checked="" type="checkbox"/> For receiving Office use only
<input checked="" type="checkbox"/> This sheet was received with the international application
Authorized officer <b>Sonya D. Barnes</b> PCT/Internat'l Appl Processing Div (703) 305-3665

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Authorized officer

**ATCC Deposit No.: 209059****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner. the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

**NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

**AUSTRALIA**

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

**FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

**UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 209059**

**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> . line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209060
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only
<input checked="" type="checkbox"/> This sheet was received with the international application
Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3865

For International Bureau use only
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Authorized officer

**ATCC Deposit No.: 209060**

## **CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner. the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

## **NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office). or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

## **AUSTRALIA**

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent. or prior to the lapsing, refusal or withdrawal of the application. to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

## **FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

## **UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 209060**

### **DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

### **SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

### **NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.





Applicant's or agent's file  
reference number

PA101PCT

International application No.

UNASSIGNED

## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT <span style="float: right;">Further deposits are identified on an additional sheet <input type="checkbox"/></span>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209061</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) <span style="float: right;">This information is continued on an additional sheet <input type="checkbox"/></span>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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Authorized officer <b>Sonya D. Barnes</b> <b>PCT/Internat'l Appl Processing Div</b> <b>(703) 305-3665</b>

<input type="checkbox"/> For International Bureau use only This sheet was received by the International Bureau on:
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**ATCC Deposit No.: 209061**

## **CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

## **NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

## **AUSTRALIA**

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

## **FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

## **UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 209061**

## **DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

## **SWEDEN**

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## **NETHERLANDS**

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

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B. IDENTIFICATION OF DEPOSIT <span style="float: right;">Further deposits are identified on an additional sheet <input type="checkbox"/></span>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209062</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) <span style="float: right;">This information is continued on an additional sheet <input type="checkbox"/></span>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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**ATCC Deposit No.: 209062**

## **CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

## **NORWAY**

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## **AUSTRALIA**

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## **FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

## **UNITED KINGDOM**

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**ATCC Deposit No.: 209062****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

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B. IDENTIFICATION OF DEPOSIT <span style="float: right;">Further deposits are identified on an additional sheet <input type="checkbox"/></span>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209063</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) <span style="float: right;">This information is continued on an additional sheet <input type="checkbox"/></span>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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**ATCC Deposit No.: 209063****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

**NORWAY**

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**AUSTRALIA**

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**FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

**UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 209063****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT <span style="float: right;">Further deposits are identified on an additional sheet <input type="checkbox"/></span>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209064</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) <span style="float: right;">This information is continued on an additional sheet <input type="checkbox"/></span>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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**ATCC Deposit No.: 209064**

## **CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

## **NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

## **AUSTRALIA**

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## **FINLAND**

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## **UNITED KINGDOM**

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**ATCC Deposit No.: 209064****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

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**NETHERLANDS**

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Applicant's or agent's file referencenumber	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> . line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209065
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
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**ATCC Deposit No.: 209065**

## **CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

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The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

## **FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

## **UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 209065****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.



Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209066
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only	For International Bureau use only
<input checked="" type="checkbox"/> This sheet was received with the international application	<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3865	Authorized officer

**ATCC Deposit No.: 209066**

## **CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

## **NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

## **AUSTRALIA**

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

## **FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

## **UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 209066****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file  
reference number

PA101PCT

International application No.

UNASSIGNED

## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT <span style="float: right;">Further deposits are identified on an additional sheet <input type="checkbox"/></span>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209067</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) <span style="float: right;">This information is continued on an additional sheet <input type="checkbox"/></span>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g. "Accession Number of Deposit")	

<p>For receiving Office use only</p> <p><input checked="" type="checkbox"/> This sheet was received with the international application</p> <p>Authorized officer <b>Sonya D. Barnes</b> <b>P&amp;T/Internat'l Appl Processing Div</b> <b>(703) 305-3665</b></p>	<p>For International Bureau use only</p> <p><input type="checkbox"/> This sheet was received by the International Bureau on:</p> <p>Authorized officer</p>
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**ATCC Deposit No.: 209067**

## **CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

## **NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

## **AUSTRALIA**

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

## **FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

## **UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 209067****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209068
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

<input checked="" type="checkbox"/> For receiving Office use only This sheet was received with the international application	<input type="checkbox"/> For International Bureau use only This sheet was received by the International Bureau on.
Authorized officer <b>Sonya D. Barnes</b> P&T/Int'l Appl Processing Div (703) 306-3665	Authorized officer

**ATCC Deposit No.: 209068**

## **CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

## **NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

## **AUSTRALIA**

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

## **FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

## **UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.



**ATCC Deposit No.: 209068****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by an applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13*bis*)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209069
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

<input checked="" type="checkbox"/> For receiving Office use only This sheet was received with the international application	<input type="checkbox"/> For International Bureau use only This sheet was received by the International Bureau on:
Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665	Authorized officer

**ATCC Deposit No.: 209069****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

**NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

**AUSTRALIA**

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

**FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

**UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 209069**

**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 12 January 1998	Accession Number 209579
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

<input checked="" type="checkbox"/> For receiving Office use only This sheet was received with the international application	<input type="checkbox"/> For International Bureau use only This sheet was received by the International Bureau on:
Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3865	Authorized officer

**ATCC Deposit No.: 209579**

## **CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

## **NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

## **AUSTRALIA**

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## **FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

## **UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 209579**

## **DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

## **SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

## **NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 12 January 1998	Accession Number 209578
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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Authorized officer <b>Sonya D. Barnes</b> <b>PCT/Internat'l Appl Processing Div</b> <b>(703) 305-3665</b>

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Authorized officer



**ATCC Deposit No.: 209578**

## **CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

## **NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

## **AUSTRALIA**

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

## **FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

## **UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 209578****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file  
reference number

PA101PCT

International application No.

UNASSIGNED

## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13<sup>bis</sup>)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 16 July 1998	Accession Number 203067
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States) Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable) The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

<input checked="" type="checkbox"/> For receiving Office use only This sheet was received with the international application Authorized: <b>Sonya D. Barnes</b> <b>PCT/Int'l Appl Processing Div</b> <b>(703) 306-3865</b>	<input type="checkbox"/> For International Bureau use only This sheet was received by the International Bureau on: Authorized officer
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**ATCC Deposit No.: 203067**

## **CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

## **NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

## **AUSTRALIA**

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

## **FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

## **UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 203067**

**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 16 July 1998	Accession Number 203068
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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**ATCC Deposit No.: 203068**

#### **CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

#### **NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

#### **AUSTRALIA**

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

#### **FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

#### **UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 203068**

**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.



Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 01 February 1999	Accession Number 203609
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3065	Authorized officer

**ATCC Deposit No.: 203609****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

**NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

**AUSTRALIA**

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

**FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

**UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 203609****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

**NETHERLANDS**

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 01 February 1999	Accession Number 203610
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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<input checked="" type="checkbox"/> This sheet was received with the international application	<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer Sonya D. Barnes PCT/Int'l Appl Processing Div (703) 305-3665	Authorized officer

**ATCC Deposit No.: 203610**

## **CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

## **NORWAY**

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

## **AUSTRALIA**

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## **FINLAND**

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

## **UNITED KINGDOM**

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

**ATCC Deposit No.: 203610****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

**SWEDEN**

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**NETHERLANDS**

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> . line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 17 November 1998	Accession Number 203485
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g. "Accession Number of Deposit")	

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Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665

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**ATCC Deposit No.: 203485**

## **CANADA**

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## **NORWAY**

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## **AUSTRALIA**

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## **FINLAND**

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## **UNITED KINGDOM**

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**ATCC Deposit No.: 203485****DENMARK**

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**SWEDEN**

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**NETHERLANDS**

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 18 June 1999	Accession Number PTA-252
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

<b>For receiving Office use only</b> <input checked="" type="checkbox"/> This sheet was received with the international application Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 306-3665	<b>For International Bureau use only</b> <input type="checkbox"/> This sheet was received by the International Bureau on: Authorized officer
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**ATCC Deposit No.: PTA-252****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

**NORWAY**

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**FINLAND**

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**UNITED KINGDOM**

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**ATCC Dep sit No.: PTA-252**

**DENMARK**

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**SWEDEN**

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**NETHERLANDS**

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 18 June 1999	Accession Number PTA-253
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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**ATCC Deposit No.: PTA-253**

## **CANADA**

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## **FINLAND**

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## **UNITED KINGDOM**

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**ATCC Deposit No.: PTA-253**

**DENMARK**

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**NETHERLANDS**

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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## INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 22 December 1999	Accession Number PTA-1081
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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**ATCC Deposit No.: PTA-1081**

## **CANADA**

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## **FINLAND**

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## **UNITED KINGDOM**

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***What Is Claimed Is:***

1. An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:

(a) a polynucleotide fragment of SEQ ID NO:X or a polynucleotide fragment of the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X;

(b) a polynucleotide encoding a polypeptide fragment of SEQ ID NO:Y or a polypeptide fragment encoded by the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X;

(c) a polynucleotide encoding a polypeptide fragment of a polypeptide encoded by SEQ ID NO:X or a polypeptide fragment encoded by the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X;

(d) a polynucleotide encoding a polypeptide domain of SEQ ID NO:Y or a polypeptide domain encoded by the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X;

(e) a polynucleotide encoding a polypeptide epitope of SEQ ID NO:Y or a polypeptide epitope encoded by the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X;

(f) a polynucleotide encoding a polypeptide of SEQ ID NO:Y or the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X, having biological activity;

(g) a polynucleotide which is a variant of SEQ ID NO:X;

(h) a polynucleotide which is an allelic variant of SEQ ID NO:X;

(i) a polynucleotide which encodes a species homologue of the SEQ ID NO:Y;

(j) a polynucleotide capable of hybridizing under stringent conditions to any one of the polynucleotides specified in (a)-(i), wherein said polynucleotide does not hybridize under stringent conditions to a nucleic acid molecule having a nucleotide

sequence of only A residues or of only T residues.

2. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises a nucleotide sequence encoding a protein.

5

3. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises a nucleotide sequence encoding the sequence identified as SEQ ID NO:Y or the polypeptide encoded by the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X.

10

4. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises the entire nucleotide sequence of SEQ ID NO:X or the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X.

15

5. The isolated nucleic acid molecule of claim 2, wherein the nucleotide sequence comprises sequential nucleotide deletions from either the C-terminus or the N-terminus.

20

6. The isolated nucleic acid molecule of claim 3, wherein the nucleotide sequence comprises sequential nucleotide deletions from either the C-terminus or the N-terminus.

25

7. A recombinant vector comprising the isolated nucleic acid molecule of claim 1.

8. A method of making a recombinant host cell comprising the isolated nucleic acid molecule of claim 1.

30

9. A recombinant host cell produced by the method of claim 8.

10. The recombinant host cell of claim 9 comprising vector sequences.

11. An isolated polypeptide comprising an amino acid sequence at least  
5 95% identical to a sequence selected from the group consisting of:

(a) a polypeptide fragment of SEQ ID NO:Y or of the sequence encoded by  
the cDNA included in the related cDNA clone;

(b) a polypeptide fragment of SEQ ID NO:Y or of the sequence encoded by  
the cDNA included in the related cDNA clone, having biological activity;

10 (c) a polypeptide domain of SEQ ID NO:Y or of the sequence encoded by the  
cDNA included in the related cDNA clone;

(d) a polypeptide epitope of SEQ ID NO:Y or of the sequence encoded by the  
cDNA included in the related cDNA clone;

15 (e) a full length protein of SEQ ID NO:Y or of the sequence encoded by the  
cDNA included in the related cDNA clone;

(f) a variant of SEQ ID NO:Y;

(g) an allelic variant of SEQ ID NO:Y; or

(h) a species homologue of the SEQ ID NO:Y.

20 12. The isolated polypeptide of claim 11, wherein the full length protein  
comprises sequential amino acid deletions from either the C-terminus or the N-  
terminus.

25 13. An isolated antibody that binds specifically to the isolated polypeptide  
of claim 11.

14. A recombinant host cell that expresses the isolated polypeptide of  
claim 11.

30 15. A method of making an isolated polypeptide comprising:

(a) culturing the recombinant host cell of claim 14 under conditions such that said polypeptide is expressed; and

(b) recovering said polypeptide.

5           16.    The polypeptide produced by claim 15.

17.    A method for preventing, treating, or ameliorating a medical condition, comprising administering to a mammalian subject a therapeutically effective amount of the polypeptide of claim 11 or the polynucleotide of claim 1.

10

18.    A method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising:

(a) determining the presence or absence of a mutation in the polynucleotide of claim 1; and

15

(b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or absence of said mutation.

19.    A method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising:

20

(a) determining the presence or amount of expression of the polypeptide of claim 11 in a biological sample; and

(b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the polypeptide.

25

20.    A method for identifying a binding partner to the polypeptide of claim 11 comprising:

(a) contacting the polypeptide of claim 11 with a binding partner; and

(b) determining whether the binding partner effects an activity of the polypeptide.

30

21. The gene corresponding to the cDNA sequence of SEQ ID NO:Y.

22. A method of identifying an activity in a biological assay, wherein the method comprises:

- 5 (a) expressing SEQ ID NO:X in a cell;  
(b) isolating the supernatant;  
(c) detecting an activity in a biological assay; and  
(d) identifying the protein in the supernatant having the activity.

10 23. The product produced by the method of claim 20.

## SEQUENCE LISTING

<110> Craig Rosen,  
Steve Ruben

<120> Human Prostate Cancer Associated Gene Sequences and Polypeptides

<130> PA101PCT

<140> Unassigned

<141> 2000-03-08

<150> 60/124,270

<151> 1999-03-12

<160> 1890

<170> PatentIn Ver. 2.0

<210> 1

<211> 717

<212> DNA

<213> Homo sapiens

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ccggctkccc  agccaggcac  caccctgcg  tgtataccca  ccgtcgctcc  amccatggtc  660
cggcccacgc  cccggccaga  tgtgkaccct  ccatctgtgg  gcaacttcct  ggtgcta  717
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<210> 2

<211> 1625

<212> DNA

<213> Homo sapiens

<400> 2

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caagaacaaa  tctgaaggag  gcctctgaca  tcaagcttga  accaaatag  ttgaatggct  60
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tgctgcagga  ggaagaactg  gctcatgaga  ctgcacaaaa  aggggaggca  aagtgtcata  180
agagtgcac  aggcattgtc  aaaaagaagt  cagcacaagg  aaaacttgtg  aaacagtttg  240
caaaaataga  ggaatctact  ccagtgcacg  attctcctgg  aaaagacgac  gcggtaccag  300
atttgatggg  tccccattct  gaccaggggtg  agcacagtgg  cactgtgggc  gtgcctgtga  360
gctacacaga  ctgtgctcct  tcaccgcgtc  gttgttcagt  tgtgacatca  gatagcttca  420
```



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gaacaaaaga cagctttaga actgcaaaaa gtaaaaagaa gaggcgaatc acaaggatat 480
atgcacagtt aatcctagaa aataactctg ggattcccaa attgactctt cgtaggcgctc 540
atgatagcag cagcaaaaaca aatgaccaag agaatgatgg aatgaactct tccaaaataa 600
gcatcaagtt aagcaaagac catgacaacg ataacaatct ctatgtagca aagcttaata 660
atggatttaa ctcaggatca ggcagtagtt ctacaaaatt aaaaatccag ctaaaacgag 720
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tcccccttgg agttttgtca gtttcacact gtttgctggc ccagggtgtac tgtttggtggc 1560
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aaaaa 1625
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<210> 3

<211> 2435

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (19)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (28)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (51)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (53)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (110)

<223> n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (2433)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (2434)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 3

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wrasttscmk ttgsygsttg yctktcytst gtgtgtgtga aattatgaan tcttttgaaa 120
gtttggcgcg cggamcaggt ttctgttgct tacaactcat tagattttga accagagata 180
ttctttgcct tggggtctcc aattgctatg tttctcacta ttcgaggagt tgataggata 240
gatgagaatt acagccttcc tacctgtaaa gggttcttca atatttatca tccgcttgat 300
ccagtggcat atagattaga acctatgatt gttccagatt tggacctaaa agctgttctc 360
attccacatc acaaaggcag aaaaagactt catttagaat tgaaagagag tctctctcgt 420
atgggatctg atttgaagca gggttttatt agctctctca aaagtgcctg gcagacatta 480
aatgagtttg cccgtgctca tacgtcttca acccagttgc aagaagaatt ggagaagggtg 540
gccaatcaga tcaaagaaga agaagaaaag caagtagttg aagcagaaaa ggttggtgaa 600
agtccagatt tttccaagga tgaggactac ttaggaaagg ttggaaagggt taaatggagg 660
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ttcgctcttc cagagtcact tatgctattg ggcaatctga agatactgct ctgttactac 780
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acacagtga aaaaatcagt accacatttg gacagtatag gtgagaaaac ataattataa 1080
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actgctttgt aatatttcac tttgttttac tacaaattca gatcactttg ttttactata 1800
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tccagtatgt aacgttagca ttggcyccct aatggtagaa ttagaacagc aagattgtag 2160
agcctgtaat tgactcccag acaacataga tttcagccca cctcattcct acagctgagg 2220
cccaggacaa taaatgcctt tcccagactg ggtagtggca gatctgggat ggaatatggt 2280
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```

<210> 4

<211> 986

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (131)

<223> n equals a,t,g, or c

<400> 4

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caggcgcggc gaatggtgac agagacgtcc cgcaggcgga gaatacaaga gcttgaagaa 120
cgccgcagga ntttcgtgga agcctgcaga gcaagggaag cagcgtttga tgccgaatat 180
cagcgaaaac ctcacagggt ggacctcgat attttaacct ttacgatagc tctgactgcc 240
tctgaagtta tcaaccctct gatagaagaa cttggttgcg ataagtttat caatagagaa 300
tagttagggtg gtgacactac ttcaagagaa cctctgcatt ccagtcatac caatcctgca 360
acttgatttt cagaagtcaa gagtatatcg cgataagaca gtgcacagggt ggaggggaaa 420
aaaaggggga gggggaagct tatcttga aaagcatcaca gaagtagaaa aaaatgtcga 480
aagcattata actgtaacgt tctttgagtt tgtgattgat ccacattttt cccctgcat 540
tatggaaaat gtctctcagc attgctttat taciaagtaa aggatggttt tataaaattg 600
agactgatga aacatcaata ctagagccca tgaggatgaa agaaattatc aaatagtgtc 660
gaacagaata agatgttaac gctgagttat taggactgga aggctatgaa aagaacttga 720
aattgtcgga atatgtgtc tcttcatgtc atattcaata gaagtttcta gtttaagatt 780
gattttgtgt tttcttaggc atttcaagt acaagcaaag taaatgtata tattatgtga 840
taaatacatgt tttcaagaac gtcaaatctc tggacttttt tctttcaatt ttttaatttt 900
aaagtttttt tggattataa aaatctattc acaagccaaa aaatatataa aatatacagc 960
gaaaagccaa aaaaaaaaaa aaaaac 986

```

<210> 5

<211> 370

<212> DNA

<213> Homo sapiens

<400> 5

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tagtggatcc cccgggtgac aggaattccg agcccctggc gtccagcaag atgagcgcc 60
tgccagccca atccattcaa cctacatccc aattcccact tcagcaattt gtgccacagg 120
atctaattggc tctgccccaa caggaatctc agtacaatgc ttgtcccctg ccaccacagg 180
ctcagcatca gtagatctct gttgtaccag agatatttct ctgttacctg gagagccacc 240
tattgtgtgt cccacagggt tttttggccc cttgccgact ggcagtgtcg gtttgctatt 300
tgatctctca agcctaaatt taaaagggtg tcaagtacat actggtgtaa ttgattctga 360
tattcagggtg 370

```

<210> 6

<211> 511

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (511)

<223> n equals a,t,g, or c

<400> 6

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atgagtcatt gtgcttggt ccaaaatctt taaagcctat ctaaaatggt ctctttgatt 60
tcatgccaca aaatttggtta gctccacctt taaaatatat ttagattaag acctctcttc 120
atcaccaccc tgctgtcacc ctaacaaagc aaccatcatc tctcaaaata aatcctaata 180
tccttagggc ttcctaggcc tactctttat gccccaggct acctatccag gtgaatctct 240
tccagtcttc ctccatgaat ttctgtctca cagaatgcat gtaccattgc actttgtaac 300
gtcagtctct cccaccagac aatgatcaga ttcttagttg tctctttata cccattcaca 360
gtgcactgac tgagcacaaa tttaaggctt caataaatgg taagtgaatg aataatgaat 420
gaatgaatgc tacaatattg attataatgg ataaagagat atattgacct gcttgacaga 480
aagccgaggg gggcaaagta aaatgggcct n 511
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<210> 7

<211> 718

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (565)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (630)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (634)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (676)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (702)

<223> n equals a,t,g, or c

<400> 7

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gaggggacag gctgacstgg aggrccagag gccccggag gagcactgaa ggagaagatc 120
tgccagtggg tctccattgc ccagctcctg cccacactcc cgctgttgcc cctgaccaga 180
gtcatcatgc ctcttgagca gaggagtcag cactgcaagc ctgaagaagg ccttgaggcc 240
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cgaggagagg ccctgggcct ggtgggtgcg cagctcctgc tactgaggag caggaggctg 300  
cctcctcctc ttctamteta rttgaagtca ccctggggga ggtgcctgct gccgagtcac 360  
cagatcctcc ccagagtcct cagggagcct ccagcctccc camtaccatg aactaccctc 420  
tctggagcca atcctatgag gactccagca accaagaaga ggaggggcca agcaccttcc 480  
ctgacctgga gtctgagttc caagcagcac tcagtaggaa ggtggccaag ttggttcatt 540  
ttctgctcct caagtatcga gccanggagc cggtcacaaa ggcagaaatg ctggggagtg 600  
tcgtcggaaa attggcaagt acttcttttn ctgngatctt caagcaaaag ctttccgatt 660  
tcctttgcaa cttggncttt tggcattcga agcttgaatg gnaagtggga cccccatt 718

<210> 8

<211> 445

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (353)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (411)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (435)

<223> n equals a,t,g, or c

<400> 8

aattcggcac gagctgcact cccggctgga caacagagca agactgtgtc tcaaaaaaat 60  
aaaaataaaa ataaaaataaa ataaaaagaa aaaaggaaaag aaaagaaagt gtaagacata 120  
tttgatacat aatttggccg agtttatcca taaattctat gtcttccttt ttatctcctt 180  
tcataattct acaccctgct gtggcctggc caacataatg atttaggtga tctagagttt 240  
agtcaaactg gataattgat tgtaattgct tagaaattta ccacaaaaat cgcctctgtt 300  
tctttgggat tgctcctaac ttttcacttc ttttgagggc tgcacacgct gtnctcagca 360  
gtactgggtc ccagccactg ggggaagaaa gaaatgcatg gtaggacagc ncttaccaat 420  
tccttttaat tgcnaattc gaagc 445

<210> 9

<211> 758

<212> DNA

<213> Homo sapiens

<400> 9

gtgggactac attctctgtg ccgggcttag agaacacgaa gagggagcca tctgccacac 60  
tctggaggct gaagcctgca ccagtgcctgc tcgcctcact gtggtagggtg gtggtgatgg 120  
aaactgcaga tcggccagag tggtagaaaa gttgctgcag ggtttttctg gctttgcctg 180  
cccagccgct ccatgcctgg ctagaggaga aggaggagcc acatgtggta cactggaggc 240  
tggagcctgc agatggcatg gctctgcggc tcaccttgct gcagttgggtg gtggtgacag 300  
agactgcagc ttgactgtag tgaatttgga aattatctgt ctggaagctc tgagtttatc 360

ttgggacctc aagaggagag gatcacccaa ctcacagcaa tcaaactcca aatgggtgctg 420  
taaactgaac cacacatgga caggccattc ttccgaggac ccttagattg atcccagggg 480  
gagccctagc tgctattccc cattcaacgc cccttttcag caggaagtag ccagaaggag 540  
tcgccgcccc aaatccccta acagcagtta gtgtggcatc tccacaggaa gtaatgttgt 600  
aggagttact aagaaattat tttaggcaga tagagaggaa aaggggtcct tgggaagttt 660  
tcatttttta aagcatctct ggaaaagttt cttgtaaagc cccggctctt agagccaggc 720  
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<210> 10

<211> 3064

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1375)

<223> n equals a,t,g, or c

<400> 10

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gccacatata ctgtgcgcac cttcgcactc cacaagagtg gctccagtga gaagcgtgag 120  
ctgcgtcagt ttcagttcat ggccctggcca gaccatggag ttcctgagta cccaactccc 180  
atcctggcct tcctacgacg ggtcaaggcc tgcaaccccc tagacgcagg gcccatggtg 240  
gtgcactgca gcgcggggtg gggccgcacc ggctgcttca tcgtgattga tgccatggtg 300  
gagcggatga agcacgagaa gacgggtggac atctatggcc acgtgacctg catgcgatca 360  
cagaggaact acatggtgca gacggaggac cagtacgtgt tcatccatga ggcgctgctg 420  
gaggctgcca cgtgcggcca cacagagggtg cctgcccgca acctgtatgc ccacatccag 480  
aagctggggc aagtgcctcc aggggagagt gtgaccgcca tggagctcga gttcaagttg 540  
ctggccagct ccaaggccca cacgtccgcg ttcacagcg ccaacctgcc ctgcaacaag 600  
ttcaagaacc ggctggtgaa catcatgccc tacgaattga cccgtgtgtg tctgcagccc 660  
atccgtggtg tggagggtc tgactacatc aatgccagct tcctggatgg ttatagacag 720  
cagaaggcct acatagctac acaggggcct ctggcagaga gcaccgagga cttctggcgc 780  
atgctatggg agcacattc caccatcatc gtcagtctga ccaagcttcg ggagatgggc 840  
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cagaaccaca gatgtgtctg ggagagcctg gcaaggcatt cctcatcacc atcgtgtttg 2160  
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acaa 3064

<210> 11

<211> 1496

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (643)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1478)

<223> n equals a,t,g, or c

<400> 11

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aagaagtctg tctgatgaag ctcggaagc attttgcaat attccctttg gctgtgttcc 120  
tgtgttccct gctccactt ttcttccct ggtttgtgat tattaggaga gaggttttgc 180  
aaagactcgt tgctgtgaaa gaatcttttt ttaattttta tcctagagtc agtcactttt 240  
attccaggta gtcattgctga tctcttatac caaagccagc taaccaggtt catcctacca 300  
tcctcatgga agactgtgtg tatgaattgg agtaacagaa ctgaaataca cttaaacagt 360  
gacagcagta cttccaggg tgggggccat atttctctgt gtcctactct gagcaacttc 420  
tcagagatac gagggggcta gggttttccc atctgggaaa tggggtgaaa gtctgcagat 480  
tgttaaatga aatatagaat cagagaaaaa gaaaagtcag tgatataaat agatcatttc 540  
atagaaatta gggtagattt ttatttcaac tactactgga gaatttaata aaaggcatta 600  
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<211> 1427

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (1395)

<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<221> misc feature

<222> (1407)

<223> n equals a,t,g, or c

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<210> 13

<211> 3548

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (346)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (389)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1103)

<223> n equals a,t,g, or c

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<210> 14

<211> 466

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (95)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (433)

<223> n equals a,t,g, or c

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tatcatctac ttaaaggctt tggttackkc ttgccaatth ctcgtctgta tgcaaagtac 420
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<210> 15

<211> 864

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (835)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (847)

<223> n equals a,t,g, or c

<400> 15

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cactctttct ttacactttt ttttgarggc aaggaggagg gcaccagttg cccgnttccc 840
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<210> 16

<211> 2805

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (11)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (31)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (48)

<223> n equals a,t,g, or c

<400> 16

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<210> 17

<211> 710

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (21)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (608)

<223> n equals a,t,g, or c

<400> 17

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<210> 18

<211> 992

<212> DNA

<213> Homo sapiens

<400> 18

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<210> 19

<211> 1795

<212> DNA

<213> Homo sapiens

<400> 19

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<211> 709

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (708)

<223> n equals a,t,g, or c

<400> 20

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<211> 649

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (596)

<223> n equals a,t,g, or c

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<221> misc feature

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (624)

<223> n equals a,t,g, or c

<400> 21

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<210> 22

<211> 1607

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (820)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (821)

<223> n equals a,t,g, or c

<400> 22

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<210> 23

<211> 578

<212> DNA

<213> Homo sapiens

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<221> misc feature

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<220>

<221> misc feature

<222> (27)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (528)

<223> n equals a,t,g, or c

<400> 23

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<211> 2756

<212> DNA

<213> Homo sapiens

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<221> misc feature

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (109)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (249)

<223> n equals a,t,g, or c

<400> 24

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&lt;210&gt; 25

&lt;211&gt; 2680

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 25

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<211> 1859

<212> DNA

<213> Homo sapiens

<400> 26

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<211> 634

<212> DNA

<213> Homo sapiens

<220>

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 <223> n equals a,t,g, or c

<220>  
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<220>  
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<210> 28  
 <211> 1632  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (926)  
 <223> n equals a,t,g, or c

<400> 28  
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 atcaacacca tgagtggcag tcaggagctg cagtggatgg tacagcctca tttcctgggg 240  
 cccagcagtt acccaggcc tctgacctac cctcagtaca gccccccaca rccccggcca 300  
 ggagtcattc gggccctggg gccgcctcca ggggtacgtc gaaggccttg tgaacagatc 360  
 agcccggagg aagaggagcg ccgcccagta aggcgcgagc ggaacaagct ggctgcggcc 420  
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 ggggacacag gcagtaccag tggcaccagc agcccaccag cccctgccc ccctgtacct 660  
 tgtatctccc tttccccagg gcctgtgctt gaacctgagg cactgcacac cccacactc 720  
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cctgagcctt gtgcctcagc tcatcgcaag agtagcagca gcagcggaga cccatcctct 840
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actgcaaaaa aa 1632

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<210> 29

<211> 2539

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (105)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (936)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (951)

<223> n equals a,t,g, or c

<400> 29

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aactgcagca gccattgctg ccaagaagca tccattctac accantcctg ctgttgatcat 120
ggcacacggg gaacagccca tccctggtct catcaattat tcccatcatt caacagatga 180
acggrttcca gactccatca tttctcgttg tggtcagggt ctcccacgag acacagcctc 240
cctcagcact actccttcag aatcgccctg tgctcaggct acatctcgcc tctctacagc 300
ttcctgcca acacaaaaag tccagtcag gtgcagcagc aaggagaaca ttctcagagc 360
cagwcacagt gctgtcgata tcaccaaggt ggctagaaga catcgcatgt ytccttttcc 420
tctgacatct atggacaaaag cctttatcac agtccctggag atgactccgg tgcttgggac 480
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tgcagtagta caagtggaag ataccgaact tatcagggaa tcagatgatg gcaactgaaga 780
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tcattattta aaaaaaaaaa 2539
```

&lt;210&gt; 30

&lt;211&gt; 494

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 30

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taacatatga aaaaacagct acttgtgcct gactatgggc attttcatgt acasgagttc 120
ttgaagctga gtttattgag aatggttttg ttacctgctg atagctatct ttttgtgttt 180
agttcttttt gacttctttg gcctctaata ttttgacagt ggcacttaga tgacagtcag 240
caattgcaac agtgaatgaa atcacacagc ttgagttcaa ggtggaaaga gaaaaaaatc 300
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tcttgctctc gaccttaggg tgtaatgtgg ccctgctcct tgtatggtga ataacttgtg 420
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ctctgcatcc ttac 494
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&lt;210&gt; 31

&lt;211&gt; 1263

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 31

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ctccctgcct tgggtggacc ctctgtgtg accttggcaa gtc-cgaact tttgtccgta 120
tttaagatgg agctgtttta cctacttcat aagacagttg cgaggtgcca ttgattcttg 180
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cttactttgt ggcttgtggt tgaaagtcac atcaaaagac aaatgtggcc acgttcagga 300
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gtcaacactg ggagatgcaa catagcaaaa ggacagagaa attagaattt tttgtgcaga 420
aagccctaaa ttcccacctg aatgtaactt acagctccct tacctactct cacacatgcc 480
ctcaaacatg ctagattggc ttatacatag gccaacacaa aatacaaacg tgacgtgttc 540
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ttaaagtaca tttctttcac agcagtattt tttttcataa gtggcatata aatctcattc 660
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gaagttcctc tcaagtaggc ccaagaaaca gttctagatt ttactaagtt ttattttgtc 960
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atttcactct ctaaaagcaa cagcatgtaa actagaatga aagaaggaaa ttatgtacgt 1140
atgcctaata ttctttgtga atgtctttca tttaactaaa attatattag aaaccagatt 1200
gataaataaa aaattcaaag tagttttaat tatcctaaaa aaaaaaaaaa aaaaaaaagt 1260
ttt 1263
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&lt;210&gt; 32

&lt;211&gt; 337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (337)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 32

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ttttctctct cttttacaag tgtcagttta attccagagc cctggcccag tattttctga 120
tgattttctc cccaaggaag agaaggaaat ccctgctggt tacacagctg cgatgtcaga 180
cttcctctga aacatgcact gttgctgcct attagcataa cttcagtcct tcattctctc 240
ctgactgatt agtgatctgc aggcagttta aaaaacatac tttggagggg ccgggcgtgg 300
tggctcacgc ctataatccc agcactttgg gaggctn 337
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&lt;210&gt; 33

&lt;211&gt; 1742

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (9)

&lt;223&gt; n equals a,t,g, or c



<220>  
<221> misc feature  
<222> (17)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1576)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1578)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1621)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1724)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1733)  
<223> n equals a,t,g, or c

<400> 33  
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gcttgctgtc tctcagaatt gttttcttac cttttaatgt aatgacgagt gtgcttcagt 180  
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tactaatcaa gacaaacctt tgaaagggtta cactaagtac agaactttta aaccttgctt 420  
tgtatgagtt gtactttttg aacataagct gcacttttat tttctaagtc agaggatgaa 480  
taagttaaat acatgctttg aggatagaag cagatgttct gtttggcacc acgttataat 540  
ctgcttattt tacaatatac acgtttccct aagaaatcat ggcagagatg tgagggcaga 600  
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cattattgta tcctaagtc actaggggag agagcttttg actctgttgg gttttatttg 780  
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aacatggaat actacgaatg aaatcacatc actgtatctt ttacatcaat agcctcacca 1080  
ctaatatatc ttgtatctag gtgtctataa tggctgaaac cactacatcc atctatgcca 1140

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ccaattttta atttcygtgt tcccaaaata ggtttttttag gggncatctg ttncctcccc 1740
ta 1742

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&lt;210&gt; 34

&lt;211&gt; 1166

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (965)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1090)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1094)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 34

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ccggaatgaa aacaaacggc ggccgctgcc gagtcggggc actctgctgg tcgcgggcggg 60
agtggcgtgg cgcaggggatg gcacaaaaga aatatcttca agcaaaattg acccagtttt 120
taagggaaga caggattcaa ctttggaac ctccatatac agatgaaaat aaaaaagttg 180
gtttggcatt aaaggacctt gctaagcagt actctgacag actagaatgc tgtgaaaatg 240
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acaattatag aacaacggga attgctacaa tcgaggtggt tttaccacca agactaaaaa 360
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aaatagctga aacctttgga cttcaagaaa attatatcaa aattgtcata aataagaagc 480
aactacaact agggaaaacc cttgaagaac aaggcgtggc tcacaatgtg aaagcgatgg 540
tgcttgaact aaaacaatct gaagaggacg cgaggaaaaa cttccagtta gaggaagagg 600
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tgaactactg ccagaagggtg gatttt 1166

<210> 35

<211> 1049

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (38)

<223> n equals a,t,g, or c

<400> 35

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gtgacttcac taacgtgggtg aaaacaactg ttcttctggc tgacataaat gacttcaata 360  
ctgtcaatga aatctacaaa cagtatttca agagtaattt tcctgctaga gctgcttacc 420  
aagttgctgc ttaccctaaa ggcagccgaa ttgaaattga agcagtagct atccaaggac 480  
cactgacaac ggcattcacta taagtggggc cagtgtgtgt tagtctggaa ttgttaacat 540  
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agtgtgagtt tgatgaaaat atctgaagct attatggaaa taccatgtaa tagggagagt 660  
tgaacatgaa tatttagagaa ggaatccagt tactttttta aattacacct gtgtgcacct 720  
gtattactga atataggaaa gagataccca ttacatagtt actcagtaaa caaaagagaa 780  
ataccaggta ggaaagaaga gttactattc ctgagaaata atcaagaaca tatttaattt 840  
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gtaaaattaa agtgttttaa tttgagatca aggagaagat agtggaaaca aatgttatat 960  
agataatatt tttctaattg aaataaaata ggcagatttc aaaaaaaaaa aaaaaaaaaa 1020  
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<210> 36

<211> 489

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (353)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (383)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (385)

<223> n equals a,t,g, or c

<400> 36

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ggagtcccca catTTTcatc ctgttctcag gaaaacactt tgaccactt gaagctctga 180
gctactgctt cacagcttcc tggggtcagt ctccagccaa aaccatagat atcccaamwg 240
cagccaaaacc acggctctgg gcgaaggaac gattaggttt actstagggt tccacaccct 300
gatgctcctg gcctttaatt tgacaactct ggactgccag gttttcacag acngttggac 360
atggattcaa gattgggaat gtnangggat ggtttggcaa cagtgtttgc tttgagcagt 420
tttaaaatTTT ggccaggaga ttcattgtgag caagaaatgt tagataccag ttttttgggg 480
tcaagggggg                                     489
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<210> 37

<211> 598

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (595)

<223> n equals a,t,g, or c

<400> 37

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cagaattggg ctaataaaaa taacgaccat ttctttctac tccagtctct ttcacaaact 180
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<210> 38

<211> 762

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (725)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (730)

<223> n equals a,t,g, or c

<400> 38

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taatgagatt tttggatcga tttgtatacc gaaatccaaa gcccataaa ggcaaagaaa 180
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agagaacaaa aggagctaag gataacacat tagatgaaga ttcagaagggt agtgatgatg 540
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<210> 39

<211> 1958

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1835)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1885)

<223> n equals a,t,g, or c

<400> 39

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gctcttctcg cgctgggtctc cagttcccgg tgggccgagt gcaccgcctg ctccgtaaag 180
gcaactacgc agagcggggt ggggcaggcg cgccggtgta cctggcgggcg gtgtagagt 240
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gcatcatccc gcgccacttg cagctggcca tccgcaacga cgaggagctc aacaaactgc 360
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cccggaaacg ctatcaaacc caaaggctct tttcagagcc cccctaccgt ttcaaaggaa 540
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acattcacag ggttcaaact atttgaagta aagagattat atataaagaa tccatccctc 900
aacttaccce ggtgggtcact tttctttttc ttgtgtatct gccagatt cattcctgct 960
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tgactgttac ttttacaaat ctgtgtgtat tggtnngcta agggcctgta tgggtccact 1860  
gctgtattcc caggggtccca gcatnggkgc ctggacgctg cckgggcaaa tagtagtcac 1920  
ccgaggaaat gggctggatg gaatttcatt gagggcct 1958

<210> 40

<211> 477

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (66)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (246)

<223> n equals a,t,g, or c

<400> 40

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gtcgggtgcg ctggggcctg aggagaactt tctttctttg gacgacatcc tgatgtccca 180  
cgagaagctg ccggtgcgca cggagaccgc catgcctcgc cttgggcctt cttcctggag 240  
cggagnaagg cgccgagact gacaacgcgg tcccacagac ttttatcgga cgttttcgcc 300  
gcatcatgga ctctcacag aatgcttaca acgaagacac ttcagccctg ggtagccagg 360  
ctagacgaga tggagagggg cttatttcaa acagggcaga aaggactgaa tgactttcag 420

tggtgggaga aggggcaggc ttctcagatc acagcttcca acctcgttca gaattaa 477

<210> 41

<211> 860

<212> DNA

<213> Homo sapiens

<400> 41

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<210> 42

<211> 1131

<212> DNA

<213> Homo sapiens

<400> 42

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actatttaga gtccagaggg agccatggca ctagaaatag ttgataatga aatgagattt 180
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tgtccagtga aaagggtgcca caatgcccg tattgtaaac aacagggttg cattcatgaa 660
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tatcaaagat gaccttataa tatgtacccg aatatacagt tcaagaattt tgtctgactg 1080
gaaataaatg cattttgtag caaaaaaaaa aaaaaamaaa aaaaaaaaaa a 1131
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<210> 43

<211> 1334  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1019)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1204)  
<223> n equals a,t,g, or c

<400> 43  
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<210> 44  
<211> 2351  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1106)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature



<222> (2324)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2331)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2350)

<223> n equals a,t,g, or c

<400> 44

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agatcagttt gtttctttct gtgctggtta caatgagcgt cgcacagaca tggtttcagg 2280  
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ccaagcttan g 2351

<210> 45

<211> 1587

<212> DNA

<213> Homo sapiens

<400> 45

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caaaaaaaca aaaaaaaaaa aaaaaaa 1587

<210> 46

<211> 379

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (345)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (351)

<223> n equals a,t,g, or c

<400> 46

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<210> 47

<211> 1920

<212> DNA

<213> Homo sapiens

<400> 47

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<210> 48

<211> 319  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (306)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (317)  
<223> n equals a,t,g, or c

<400> 48  
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tgaaagtaag cacaagaaga aaaaaagcct tatctttgct ctagattttg caaaggggaa 180  
atltcaacag aacgcaatca ttgctacacg tctgccaaaga cacaaggctt gggcgatctt 240  
tttttgttca tttgttttgg atacttagct agtttttcct aaatgtatac cattggaggg 300  
ggatanctgg gccttttngg 319

<210> 49  
<211> 278  
<212> DNA  
<213> Homo sapiens

<400> 49  
gacggatgaa gagatcgcg cggtggagcc gttacaaagc gttgaacgcc ggacgtacca 60  
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taccgcttcg ctggcgggcg cgtggagtga tgaccctrat gtttatcttg ctggcgggcca 180  
tgctttgggtt tggtgctgcc ccggtgggtga cgtatatcct ctgtgcgtta gtggtattgt 240  
tggcagcgcc tgttttgaat ggcagattgt acgcccgt 278

<210> 50  
<211> 652  
<212> DNA  
<213> Homo sapiens

<400> 50  
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tctttggcat ttatttggtt tttctacgtt ttcagtccca tttactccaa gactcactcc 180  
ctgccaccta gtgcatcaga tacagctact tctggttgac ttttcaaggg ggaccaccct 240  
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cctagtcagg actgataccc tttccgtttc agaggattgc caagaaaaaa ctcacagttg 420  
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cagtagctct gccgcctttc ccagagaggg ggtccagggg acatcctgga aggctggggc 600  
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<210> 51  
<211> 943  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (140)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (786)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (843)  
<223> n equals a,t,g, or c

<400> 51  
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ggatgcctgc gagcaagcan gcggtcaccg ttctctactt ctatgatgtc acaaggaaca 180  
gctatcggtat catcagtgtg gacggagcca aggtgatcat aaacagcaca atcacaccga 240  
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aatgcagtga gatcaacaga gagaaggaga agaacacgca gctgraagag gaggatcgag 780  
gagctnggag gcagagctcc gagaaaagga gacagagctg gaaagatctt ccggaataca 840  
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aggcgggcag agagagacat tcaaaacttg gaagacaaat gcg 943

<210> 52  
<211> 832  
<212> DNA  
<213> Homo sapiens

<400> 52  
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gaggaagtca gagcgatgtg ctgtgaaatc tactaccgtt tgctgggttt gaaaatggag 180  
aaaaagagtg aggaactgag aaacatggat ggccttggga acgtggaaaa gggcactga 240  
aatgggacga catgaactca aggaggctat ttatgaccat gtcatttgca acatgaagaa 300  
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gttactactgc ttgaatcctg tcagtcctat actggagtc tgttaataca aaataatagt 420
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acaatataag aayttaatgt gtaattaaga aagaactctc caccacgggg aatgtgaaag 540
gtatatgagt cccttttcac gatgcatgt catgtctttt aaataagcca tactttatgt 600
tcaataaaaa gagaataagc aggattcgcm agagaacaca atcccttttt aactgctggg 660
aagatacytt tagtcattaa tgrctggacg acaatttggg rcacmtatat ggatattggc 720
cggtttgatg tgatgtgatt gggcctctaa gtgacaacat tgttcctgt atagagtga 780
tggcaagtgc atttataaaa ttggccatca tggctgttaa atttaaaaa aa 832

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&lt;210&gt; 53

&lt;211&gt; 1554

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 53

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gagttttggg aagtgaagag aaaagaaaag ttgattacaa acgggacat attttgcttc 180
gaaatggaac cagcagttag cgagccaatg agagaccaag tcgcacggac tcatttgaca 240
gaggacactc ccaaagtga tgctgacata gaaaaggtta accmgaatca ggccmagaga 300
tgcacagtga tcgggtggctc tggattcctg gggcagcaca tgggtggagca gttgctggca 360
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ttctttctgg gtgacctctg cagccgacag gatctgtacc cagctctgaa aggtgtaaac 480
acagttttcc actgtgcgctc acccccacca tccagtaaca acaaggagct cttttataga 540
gtgaattaca ttggcaccaa gaatgtcatt gaaacttgca aagaggctgg gggtcagaaa 600
ctcattttta ccagcagtcg cagtgtcatt tttgaggggc tcgatatcaa gaatggaact 660
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gagagggcag ttctggggcg caacgatcct gagaagaatt tottaaccac agccatccgc 780
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&lt;210&gt; 54

&lt;211&gt; 281

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 54

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agctatttac aggttttaag caaatgatta tgtctgtgtt ttaaagggtat tatattctag 60
atgcttcacg gaattacgct atttatactt tataaatcta taatgtgtam tgaattaaaa 120
acaagcttgg gaaacataaa ctcaagttag aaaatatggg tttgacataa aaccttaaat 180

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atgtttcatt tgtttgcttg tttggcttgt ttgtttctaa cacaagttta acctacatgt 240  
gagtcacctt tgggattgat gagtctagrg tttgaaacca g 281

<210> 55

<211> 807

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (770)

<223> n equals a,t,g, or c

<400> 55

gcgctcgaccg gagagctgtg tcacccatgtg ggtcgggtgt cttcctcacc ctgtccgtga 60  
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gtcaagctga ggctcttttc cccccaaccc agcaccaccag cccagacagg gagctgggct 180  
cttttctgtc tctcccagcc ccactccaag cccatrcccc cagcccctcc atattgcaac 240  
agtccctact cccacaccag gtccccgctc cctcccactt acscagarc tttctcccca 300  
ttgcccagcc aactccctgc tcccagctgc tttactaaag gggaagtcc tgggcatctc 360  
cgtgtttctc tttgtggggc tcaaaacctc caaggacctc tctcaatgcc attgggtcct 420  
tggaccgtat cactgggtcca cctcctgagc ccctcaatcc tatcacagtc tactgacttt 480  
tcccattcag ctgtgagtgt ccaaccctat cccagagacc ttgatgcttg gcctcccaat 540  
cttgccctag gataccaga tgccaaccag acacctcctt cttcctagcc aggctatctg 600  
gcctgagaca acaaatgggt ccctcagctc ggcaatggga ctctgagaac tcctcattcc 660  
ytgactctta gcccagact cttcattcag tggccacat tttccttagg aaaaacatga 720  
gcatccccag ccacaactgc cagctctctg attccccaaa tctgcatccn tcttcaaaac 780  
ctaaaaaaaa aagaaaaaaaa aagtcga 807

<210> 56

<211> 656

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (545)

<223> n equals a,t,g, or c

<400> 56

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catccactct accaatgaag tgacaagaat ttacaatgtg atagggtactc tcagaggagc 300  
agtggaaacca gacagatatg tcattctggg aggtcaccgg gactcatggg tgytggtgg 360  
tattgaccct cagagtggag cagctgttgt tcatgaaatt gtgaggagct ttggaacact 420  
gaaaaaggaa ggggtggagac ctagaagaac aattttgttt gcaagctggg atgcagaaga 480  
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tggcntgggc tttatattaa atgctgactc atctatagga aggaaactac actctgagga 600  
gttggttggg acaccgcttg atgtacagct tggtagacaa ccttaccaa gagctg 656

<210> 57  
<211> 794  
<212> DNA  
<213> Homo sapiens

<400> 57  
gcggccgcag gcagcccacc ccgyccacgt cgccggagcc gccgcgcagc agccccaggc 60  
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gcagccccga gtaccggcag cggcgcgagc gcaacaacat cgccgtgcgc aagagccgcg 180  
acaaggccaa gcggcgcaac caggagatgc agcagaagtt ggtggagctg tcggctgaga 240  
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gagcggagcg cgccctgccc tggcgcagcc agagccgccg ggtgcccgct gcagtttctt 480  
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gctaaacgtg tttattttcc cttaaattat ttttgtaatg gtagcttttt ctacatctta 600  
ctcctgttga tgcagctaag gtacatttgt aaaaagaaaa aaaaccagac ttttcagaca 660  
aaccctttgt attgtagata agaggaaaag actgagcatg ctacttttt tatattaatt 720  
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aaaaaaaaaa aaaa 794

<210> 58  
<211> 1155  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (135)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (432)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (443)  
<223> n equals a,t,g, or c

<400> 58  
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agacgtttgc aaaanggact aggtcatag taacttcgcc tgataaaciaa cttgatgcag 180  
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gacacataca tgaaatttag ctggttaacg gtgccagaaa agtcactgga caaagaacac 420  
agatgtatcg tncagacatg agnaataata aaaacggrrt tgatcaagaa attatctttc 480



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<210> 59

<211> 492

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (201)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (454)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (467)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (473)

<223> n equals a,t,g, or c

<400> 59

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gagtgtggaa aagccttcat taggaattct caactcattg tacatcaaag aactcattca 180
ggagagaaac cctatgggtg ncaatgaatg tgggaaaacc ttctctcaaa aatcaattct 240
cagtrcacat cagagaacac atacaggaga gaagccttgt aagtgcactg aatgtgggaa 300
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aaactttatg ga 492
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<210> 60

<211> 1617

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1590)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1592)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1595)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1617)

<223> n equals a,t,g, or c

<400> 60

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<210> 61  
<211> 1653  
<212> DNA  
<213> Homo sapiens

<400> 61

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tggttgaaga ggggaatcat tagcattctg ggcgttttta tattaatgt tttgtgaata 180
tgccagaaga tctgccttca acttgtaatt aggcaagata gtaaygcttg atggtaactt 240
ctatgtttgt gtagaaataa taccagttag ttttggaag ccattcagat ccattcaaaa 300
attccataaa gtatgatgta tgctttggaa gagggatatg agtgatacaa ttgttatata 360
aatggaatag acaaaccatt tgaatgcatt tttctagggc aaacattttt tgagattttt 420
gagttaagaa gatttttcgg cttgagcaga agatgtgttt gttttgcatt tttcagctcc 480
aaggaaatag ccccatggc tttaaaaggc cctgaagttc agatagtagt aggtagtgtt 540
ttgttattgt ttaatttga gagttgcagg aataatgggc agagctgtca tttgccggta 600
ckaccatctg cctacataga attattggac tgtaagctaa aacagactgt aaaagaccta 660
cttgctaaag cattgcttat tcagtgggat tcagtagata agatctattt cctgatatat 720
tgtgtcgaag ttatttgcac atcttaagaa acttttaata tctaaaacca ttgttgtaag 780
atthaggtag aggaggtttc cttttgtgtg atgcataata atagaaaaca ctgatacagt 840
gtttactatg tgccaagcaa gcatatgata actaattctt aacaactcta tgaggcaggg 900
tcatttatta tcctgttgtc atatgaggaa atctcgccag agagaagtta attaacctgc 960
ccaaggtcgt atagttagta aagtgggtcat gcttggattt taacctaggc agattacttc 1020
agagtcagcg tctgccttac tatcctgttt cctgagcagg aatttccctt tgtgtcaggc 1080
aacactaggt gttaggagtg gaggtgtgca gatgttgctt tacattctgt tttcctgatg 1140
tggtgtgctt cctaagagta caaacctgag catatgtcca ggcttgcaaa gtctcaggca 1200
aagctgggac taaggcttgt gtttcctgcc ttgggtagga ttttcttcta tgcatgttgg 1260
gtgcttctca cttaacctaa tagtatgcct tgtctgtttt cccccccttc cctttttgtt 1320
taaattgatt cacagaacac aaaaatttac taggtatgaa catttgaaaa aatggaatag 1380
agaaaatggt acatcacatg taataaagat aaatattgtt ttgtgaaatg tctttttcaa 1440
tcataaatat gtgttgtgtg ctatataaaa ctatttctta ttgtggatat tgaagtttga 1500
agcctgttgt tcatctatag atgcactgga tgggattgga agtcttcaga tttcagtagg 1560
gttttccaca agcttatgaa gacattgttc tgtttaggct gtaaactgtt tttatttctt 1620
gatgaaaaat gttcttctat ttatatgatc cca 1653
```

<210> 62  
<211> 440  
<212> DNA  
<213> Homo sapiens

<220>

<221> misc feature

<222> (408)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (410)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (431)

<223> n equals a,t,g, or c

<400> 62

```
gaattcggca gaggaataaa taatttatta tatggtaaag gtggcatttc aaatcaatgg 60
gaaaaggtac gtttattgac aaaggtattg aagcaacggg ttaagatttg gaaaataact 120
atctctgctc ccaaacattc accatatgag actgtagacc taataaaaaat aaacataaga 180
ttatgagaat aaaatatcaa taaatatttt atactatctt gcagtgggat aggaattgtc 240
tcactcctgc tggggtgact ccccatgaac ccaggggctc ttcagttcca aagrggaaaa 300
aggggaacag atggcctcct ccccttcctc actccctcctg gaccaggat tgctccctga 360
aggttttcga gccaccctcc ttcccattcc tcctgggggg ccaaggangn ttaaacagca 420
gggcccttcc nggtgtgccc                                     440
```

<210> 63

<211> 1062

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (948)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (974)

<223> n equals a,t,g, or c

<400> 63

```
aattcggcac gagggaaacct tgaaccagcc rctgaccaa ttggatagat cttctgaaga 60
gcctttggga gttctggtaa atcccaacat gtaccagtcc cctccccagt gggttgacca 120
cacaggtgca gcctcacaga agaaggcttt ccgttcttca ggatttggac tagagttcaa 180
ctcatttcag caccagttgc gaatccagga tcaagaattt caggaaggct ttgatgggtg 240
ctgggtgcctc tctgtacatc agccctgggs ttctctgctt gtcagaggga ttaaagggt 300
ggagggcaga tcctggtaca cccccacag aggacgactt tggatagcag ccacagctaa 360
aaaaccctcc cctcaagaag tctcagaact ccaggctaca tatcgtcttc ttcgtgggaa 420
agatgtggaa tttcctaata actatccgtc agttgtcttc tgggctgtgt ggacctaat 480
gactgcttgt cccagaagca atttaaggag cagtttccag acatcagtca agaactctgat 540
tctccatttg ttttcatctg caaaaatcct caggaaatgg ttgtgaagtt tcctattaaa 600
ggaaatccaa aaatctggaa attggattcc aagatccatc aaggagcaaa gaaggggtta 660
atgaagcaga ataaagctgt ctgaccagag agaaaaggaa ctatacagca tagtgaggt 720
ttgtgtacta aaattgctat ctactgggtc tttggaattg aagtagtaga aacctaaagg 780
cttggcgtca ggcttgaata tctcagaact taaactctta ccaaaatctg tatatttttc 840
ttaaggagtg ggattcctac tttatgtaat ggggtcgaaa tctttgaaca cattatttat 900
aaaaacctgt taaaagggtc gacgggtatcg ataagcttgg atatacantt cggcacgagc 960
ccacctctac ctctnggggg accggcctgg acgctggtgg ccccgggacc cagcagagct 1020
gggggaaggg tcagcccccc aaagaaatgg ggggtgcatgc tg                                     1062
```

<210> 64

<211> 422  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (252)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (349)  
<223> n equals a,t,g, or c

<400> 64  
ggcagagggg agaggaaggg aggggagggg agcccccttct tcctggtaga tacaaagctg 60  
ggctctggat acccttgaag cagtgcacag cctgtacaac agtccccagc agccctgtct 120  
atccccccagc atctccctgc tagctgctgt tccctctcct cccgctggct gggcctgctg 180  
ccaagctgtg gtgactcagc tgagctggca cattgacccc agcttattgt ttaaaaacca 240  
gcccgactgg gnaatttatg gtttcctatc cccttccaca catttttctg gccacaaggc 300  
aagaaactta tctctggcat cttcagattt cttstatttw attttgggnc ttcccttgcc 360  
tggcaatatg ttcatagag tgggtaagtg agacctgaca ggtgttttca aggataattt 420  
ca 422

<210> 65  
<211> 709  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (674)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (684)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (692)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (697)  
<223> n equals a,t,g, or c

<400> 65  
aattcggcag agcgcttctc cattctctgt ggggtgtgtt gttttcttca tgaattccga 60

```

agtttactct tggatgatct agttgaagag ctagtggtta ctgatcacac tgtcttctct 120
ccttgaaatt ggtgcatatt agctgcttct agtcagccct ctgcccaga atccccaaaa 180
agaaaattgt tagttcaggg attgtagctt tttttttgtt ttaacatgag atatgtgatt 240
ataataaaact tcaagtattc aggaccattt tatggataaa aggagaatct aactttttaa 300
agttgggaaa atgattttaat attggaaact caagagttac aaattcttac agttatttca 360
aaactaaagg tttctttaga gctccaaatt tagagctata aatcctatat ccgtaatcaa 420
atccagtact gataacaatg aacaattgct gaagagtaat attctctctc tctttacca 480
tgtaagcctt agcattggta ctttcttgwa wtatcttttt gcatgccatt atgatcagaa 540
aaaacaaaaa gctaccaga aagggcagcc acattctaaa tgataggctt ttacctccct 600
gagggggctg ctaggtacct acctggatta ggaattcatt tggtaaaca cagggggcct 660
tttaaactta aatnaccatt tccnaataat tngtttncg tttattccg 709

```

&lt;210&gt; 66

&lt;211&gt; 1302

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 66

```

gctcgacaag aagagaaaga aggacatgct gaatagcaaa accaaaactc agtattttcca 60
ccaggaaaaa tggatctatg ttcacaaagg aagtactama gagcgccatg gatattgcac 120
cctgggggra gctttcaaca gactggactt ctcaactgcm attctggatt ccagaagatt 180
taactacgtg gtccggctgt tggagctgat agcaaagtca cagctcacat ccctgagtgg 240
catcgcccaa aagaacttca tgaatatttt ggaaaaagtg gtactgaaag tccttgaaga 300
ccagcaaaac attagactaa taagggaact actccagacc ctctacacat ccttatgtac 360
actggtccaa agagtcggca agtctgtgct ggtcgggaac attaacatgt ggggtgtatcg 420
gatggagacg attctccact ggcagcagca gctgaacaac attcagatca ccaggcctgc 480
cttcaaaggc ctcaccttca ctgacctgcc tttgtgcta caactgaaca tcatgcagag 540
gctgagcgac gggcgggacc tggtcagcct gggccagctg ccccgacct gcacgtgctc 600
agcgaagacc ggctgctgtg gaagaaactc tgccagtacc acttctccga gcggcagatc 660
cgcaaacgat taattctgtc agacaaaggg cagctggatt ggaagaagat gtatttcaaa 720
cttgtccgat gttacccaag gaaagagcag tatggagata cccttcagct ctgcaaacac 780
tgtcacatcc tttcctggaa gggcactgac catccgtgca ctgccaataa cccagagagc 840
tgctccgttt cactttcacc ccaggacttt atcaacttgt tcaagttctg aatcccagca 900
catgacaaca cttcagaagg gtccccctgc tgactggaga gctgggaata tggcatttgg 960
acacttcatt tgtaaatagt gtacatttta aacattggct cgaaacttca gagataagtc 1020
atggagagga cattggaggg gagaaatgca gttgctgact gggaatttaa gaatgtgaac 1080
ttctcactag aattggtatg gaaaagcaaa atactgtaaa taaacttttt ttctaacaat 1140
ttgccagcaa gactataagg gcaataattc tatttcagcg gtgaaaatgg agtcctctta 1200
atggtcacag aaactctctt atagtccct aggaagaaaa aggcaaaact caaatacaaa 1260
ataggacgct ttgtttacaa tgtgaaaatt tgtttagaaa ag 1302

```

&lt;210&gt; 67

&lt;211&gt; 1046

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 67

```

aattcggcac gagcttctgt tgggtgttatt ttcaattcta tttccagtgc cacaatagag 60
tgatatttaa gcaactccta caggcgaagg ccctgcagtt cctccagatt gacagttgca 120
gactgggcag tgtcaatgag aacctctcag tattgctgat ggccaaaaag tttgaaattc 180
ctgtttgccc ccatgctggg ggagttggcc tctgtgaact ggtgcagcac ctgattatat 240

```

```
ttgactacat atcagtttct gcaagccttg aaaatagggt gtgtgagtat gttgaccacc 300
tgcattgagca tttcaagtat cccgtgatga tccagcgggc ttcctacatg cctcccaagg 360
atccccgcta ctcaacagaa atgaaggagg aatctgtaaa gaaacaccag tatccagatg 420
gtgaagtttg gaagaaactc cttcctgctc aagaaaatta agtgctcagc cccaacaact 480
tttttctttc tgaagtgaag gggcttaaaa tttcttgga atagtgttac aaaaatggat 540
ttaaaaaatc ctaccgatca agatgagttc agctagaagt cataccaccc tcaggaatca 600
gctaagtaat tattacttga ttcttttagc aaatcaatgc acgttatcct acttaatcct 660
taaataagtt tagatttaac taaccctaaag tccaggagga tgttcttaca aaaatagcta 720
tatcaagggc tggcacctag acattaaact gtaatttgaa aataagcaac atgttgcata 780
acttggtgga ataattcctt gttctgttta acacttgta taaattagca gaataaaaaat 840
agtcgtgcaa caccgggggt atctggtatg caacgaagg raaaatattt cactgatata 900
ccccgaagtg gttttgcata ttttccttgc ttaattctaag catattatta gagaagtcac 960
accatgctga agctaattgag ggcaaaatgg tagtccatag attattttta aataaccctt 1020
taagggtata aaagtttaaa aaaaaa 1046
```

<210> 68

<211> 501

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (45)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (311)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (404)

<223> n equals a,t,g, or c

<400> 68

```
caagagaaga aattatgaaa gggcgtgaat accaagaggc aggttattgg gggccatctc 60
agaggctgcc caacacaggc tactcttttg ccccgatga ttcattgtcc ttccaaatgc 120
aaaatgcccc gtccaagat ctccaaaagt cttatcccat tataggatta gctcagagtt 180
cagaacctta tcatctaaag ttccagggtg aggttaaggc tttgggtgta gttattttat 240
tacagctcct agcacacttc tagtggtata ctaatgcctc ttctgtatag ttcaacttga 300
aataaatgat ntaggtactt tgatccatat ggagttctgt gtaggaagat caacctagat 360
ctgatgttag ctggtaaaca ctgtagtggt aaaaaggcac tgnnttatga tagctctttt 420
tgacagtgcac tgggattatg gggcaaatgg taaatggcat gcaattgaga tcagtattag 480
gttattaatt gaactggaat c 501
```

<210> 69

<211> 581

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (149)

<223> n equals a,t,g, or c

<400> 69

```
aattcggcac gagggaaaga aggccatgta ggggcttgct ttagtcatcc actgctaact 60
cattaactat taattcaagc aatatgtatt atagaaccgt tttgtgtagc attggaatat 120
tgtccatttt gtaagtcatt gtgaatgtnc ttaattatca gcttgaaggc atttttgtat 180
taaaagttga cattgaagaa cctaagtggg tgatgggatt tggggccagt agtgaaagta 240
tgtttcctct aaaatatttc cctaaacagt ggtatacatg gttattttat tatgagattt 300
gtatatgttc tgtgtttctc tgtgaacaat gtttcagtcct ctctgtcacc atatgtaagg 360
ggaagtccac aaatatagac tacattgcac aaaactaaaa ttgttaatta caagaaaata 420
taggtgctta ccttttgaag gtttattaat acatatgggt gtcacaatac gtatataatga 480
taaatggtgt acatatacag atgtttatgg tgtataaatt tttctatacc caaaaaaaaa 540
aaaaaaaaaa aaaaaaaaaa aaaaaagggg gggccccccc a 581
```

<210> 70

<211> 1076

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (911)

<223> n equals a,t,g, or c

<400> 70

```
tccaaacaga gggagcagct atttaagggg agcaggagtg cagaacaaac ragacggcct 60
ggggatacaa ctctggagtc ctctgagaga gccaccaagg aggagcaggg gagcgacggc 120
cggggcagaa gttgagacca ccagcagag gagctaggcc agtccatctg catttgtcac 180
ccaagaactc ttaccatgaa gaccctccta ctgttggcag tgatcatgat ctttggccta 240
ctgcaggccc atgggaattt ggtgaatttc cacagaatga tcaagttgac gacaggaaaag 300
gaagccgcac tcagttatgg cttctacggc tgccactgtg gcgtgggtgg cagaggatcc 360
cccaaggatg caacggatcg ctgctgtgtc actcatgact gttgctacaa acgtctggag 420
aaacgtggat gtggcaccaa atttctgagc tacaagttaa gcaactcggg gagcagaatc 480
acctgtgcaa aacaggactc ctgcagaagt caactgtgtg agtgtgataa ggctgctgcc 540
acctgttttg ctagaacaaa gacgacctac aataaaaaagt accagtacta ttccaataaa 600
cactgcagag ggagcacccc tcgttgctga gtccccctct ccctggaaac cttccacca 660
gtgctgaatt tccctctctc ataccctccc tccctaccct aaccaagttc cttggccatg 720
cagaaagcat cctcaccaca tcctagaggc caggcaggag cccttctata cccaccaga 780
atgagacatc cagcagattt ccagccttct actgetctcc tccacctcaa ctccgtgctt 840
aaccaaagaa gctgtactcc ggggggtctc ttctgaataa agcaattagc aaatcawrwa 900
aaaaaaaaaa naaaaaagaa aaaaagtttt ggcctaaatg agtcgtatta cagttgacgc 960
ggcggcgcaa tttagtagat ggtgtaattc gacccgagaa attccggaac cggaactctg 1020
aggggtgaca agtttcccca agagcggcgg attaaggctt gggcggacaa agggcg 1076
```

<210> 71

<211> 376

<212> DNA

<213> Homo sapiens



<220>

<221> misc feature

<222> (347)

<223> n equals a,t,g, or c

<400> 71

```
gccacgcgt ccgaggagg cgcstttcc ggtctgggtc ccsgagagga ctgccttgct 60
cacctgtccc ctgcgcgcgg ccccggggag ctcccagagag gcccmmggga tcgctggccc 120
tccgaactcc acagcaatga gcaagttggg caagttcttt aaagggggcg gctcttctaa 180
gagccgagcc gctcccagtc cccaggaggc cctgggtccga cttcgggaga ctgaggagat 240
gctgggcaag aaacaagagt acctggaaaa tcgaatccag agagaaatcg ccctggccaa 300
gaagcamggc acgcagarta agcgagggat cwgmawaaa tagatgnttt gatgcaagag 360
atcacagagc aacagg                                     376
```

<210> 72

<211> 374

<212> DNA

<213> Homo sapiens

<400> 72

```
aattcgacsa gccagggcac cctgcccattg tatcccamgc agagggagca gaaccagcgg 60
tgtaactact gtgcttgaca cccagggcag gtcttttttt aactcaccga tcttccatgc 120
aacaaaattg ttttctgtga aaagcaggaa atgaataaca acagcgtagg tactccactt 180
caaatttccc aagaaattca gaagaattgt gaacaagttg ctggttttcac aatactgcaa 240
gacactgcaa gttattccaa gttcctacag gacaacgatg cacaattatt tacttactta 300
tgtttaaata tacctatcag tttgactttc atcctttggt gacattctaa taatttatgt 360
aaataattat tcag                                     374
```

<210> 73

<211> 419

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (221)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (411)

<223> n equals a,t,g, or c

<400> 73

```
aattcggcag agctgcattg tcttttaggg ccaatggact tggaggcata gagattttat 60
aactactgcc agaaccctaaa tattgccagt sggcctcttc tgctgctggt gctagctgtc 120
ttcttctggg ggaaatgggt tgggttctaa atatgaatta acacagggct gtcttcgatg 180
aattcagcac aaaatgttct cagcaattga acactcggag ngaagtgtta ggcatttagt 240
gcagactcat agaatagcag gacagggagg gatttgatc tgggcaagca ggagatgggt 300
atgaacatct gtcttttgag acctgccgag gtggcaatga aggtagaggc ccctgtgttg 360
```

agggtctttat tcaagaggct gtgggtccctt tgggacttaa catagcatcc nttagacag 419

<210> 74

<211> 286

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (134)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (154)

<223> n equals a,t,g, or c

<400> 74

gcaggcgact tgcgagctgg gagcacttta aaacgctttg gattcccccg gcctggggtgg 60  
ggagagcgag ctgggtgccc cctagattcc ccgccccgc acctcatgag ccgaccctcg 120  
gctccatgga gccnggcaat tatgccacct tggnatggag ccaaggatat cgaaggcttg 180  
ctgggagcgg gaggggggcg gaatctgggc gccactccc ctctgaccag ccaccacgag 240  
gcgcctacgc tgatgcctgc tgtcaactat gcccccttgg atctgc 286

<210> 75

<211> 633

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (89)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (531)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (570)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (618)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (623)

<223> n equals a,t,g, or c

<400> 75

```
aggtagaaaa gcgagcagcc gtcctttcac agcctcagaa agtgctcgct tcccttcggg 60
ggctttcgcg aatcccggagg caatctcgna ggcggtatth gacctgtcca aagacgactt 120
gatacctcta taatgtaaca gaaaagggtca gaaaatatta agcaagtaga agtggtggagc 180
atattaagca agatgaacat ctcggggaagc agctgtggaa gccctaactc tgcagataca 240
tctagtgact ttaaggacct ttggacaaaa ctaaaagaat gtcattgatag agaagtacaa 300
ggtttacaag taaaagtaac caagctaaaa caggaacgaa tcttagatgc acaaagacta 360
gaagaattct tcaccaaaaa tcaacagctg agggaacagc agaaagtcct tcatgaaacc 420
attaaagttt tagaagatcg gttaagagca ggcttatgtg atcgctgtgc agtaactgaa 480
gaacatatgc ggaaaaaaca gcaagagttt gaaaatattc cggcagcaga ntcttaaact 540
tattaccgaa cttatgaatg gaaaggatan tctaccggga ggaattaaaa gctttctgga 600
caactccgcc ggaattgnga tgntcaccgc ttc 633
```

<210> 76

<211> 256

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (48)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (134)

<223> n equals a,t,g, or c

<400> 76

```
agcacaagtt caggaccagc ctgcgcaaca tagcaagatc cccatctnta caaaaaaaat 60
aaacaattag ccagggcata gtggcatatg cccattgtcc catctactct ggaggctgag 120
gcgggagggt cgangttcac agaaccacca taaccatcc agctagccag gtagaaggcc 180
tccagggtccg acgttgcatc ccccagggtc tgatgctgtc tgcaatcttc atccctaggc 240
agwagagcta aaaatg 256
```

<210> 77

<211> 694

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (668)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (673)

<223> n equals a,t,g, or c

<400> 77

```
agcagcaagg ccaagcatgc aagaktcacc atccaccctg gccatgatgc agggcctcct 60
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tgctcaacct gctgctgtcc cttgccggag caaaccttgc ttcamctttc cttttccttt 600
ttggraccam ctgaaaaagg gttggcagag aaggagggca gttcattaag ttccttgcaa 660
aaaacttngc canggttttt ttggccccaa gggtt 694
```

<210> 78

<211> 2562

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (75)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2556)

<223> n equals a,t,g, or c

<400> 78

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ggagcagaag aaatgcgtat aaacagctcc accgagaaca gtgatgaagg acttaaagtg 180
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gaggagcacg tagccagcac taatgagggg agagagccca cagactcagt tccaaaagaa 300
caaatgtcac ttgttcacgt ggggactgaa gcctttccga taagtgatga gtctatgatt 360
aaggacagaa aagatcggct gcctctggag agtgcagtgg ttagacatag tgacgcacct 420
gggctcccga atggaaggga actgacaccg gcactctycaa cttgtacaaa ttctgtgtca 480
aagaatgaaa cacatgctga agtgcttgag cagcagaacg aactttgccc atatgagagt 540
aaattcgatt cttctcttct ttcaagtgat gatgaaacaa aatgtaaacc gaattctgct 600
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gaggcagtag ataatgtgga aaatgtgggtg tcatttaatg cttaaagagca tgagaatttt 720
ctggaaacca tccaagaaca gcagaccact gaatctgcag gccaggattt aatttccatt 780
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gagttggaaa ctctggagag caacctctta gcacagcaga attcactgaa agctcaaaaa 1140
```

```

cagcagcaag aacggatcgc tgctactgtc accggacaga tgttcctgga aagccaggaa 1200
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rgcacggtaa aaaaaaaaaa aaaaaaaaaa aaaaanaaac aa 2562

```

&lt;210&gt; 79

&lt;211&gt; 1610

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 79

```

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aaactggaaa aaatcatttg taagtcttgc taattacttt tcttggagaa gaaaaaaaaa 120
gctacagttg caaacaatg tatagttttc aaaaagaagc aacttttttg ctccccagtt 180
tattcttagt ttccagccca cgccttgcca tagsratagg catagtgatg gcctcaattc 240
tttctctctt gcatccgtac cttttgctgt gtgactttgc agctcctctc attaaagagg 300
cagagccccc tctcccaccc ataggagcag gttttgagag taacagaatg aagtgaaaat 360
gacactgtgc cagttctaaag accagccctc aaaggttcat gtgtttctgc ttgctttcac 420
tgtatttgaa atgttgctgt gagaaagaca tctctgaaac agctgaatgg tcctaagaaa 480
aggatgagag atgcagggag cagagctccc aactgaggcc agcctagatc acctaagagc 540
caggccccc gtttactctc atgtgtaagc aataaatgct taccacagca ataccacca 600
ggtttgtggt tggtttatat acagcattaa tgtggcaata ggtgcaatac accctgttaa 660
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cggataaaca acaaatTTTT ttttagtata agcatatccc atacaatatt tgggatatrc 1080
ttatatTTTT atattgttta tctgacgttc aagctractg ggcatcctgt atttttctta 1140
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```

```

gcagaatctg ccatatgagt aatagaagtg agcaggccca ggactcccta agtcaagaaa 1260
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attgtttaat ctagggtgtg ggtatgtggg ttatattgta catgattttt aacttgtctg 1560
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```

<210> 80

<211> 1048

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (131)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (997)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1021)

<223> n equals a,t,g, or c

<400> 80

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aatgctaata naggtgggca ggacgcaaca actccatctt ctgtgacttc tcctacagaa 180
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agcactttat ccaattagga caagatttaa cattgttgac agtcctgtag ctattttatc 480
ataatttatt atcaatattt tacattaatg gtttcacagt tgccaattac ttggccttaa 540
gggtaaaaag tacaatatac actaaacctc aaccgttaaa gcagatgcaa aaattcacct 600
cacctaaatt gaacttcttg catatttcca ttactgactt ggattgtctt tctttcatat 660
cactaatgga gttggaataa agagctgttt gcctatccct gttaatgatg gttgtgttta 720
agaatcttcc tcgtcacgtt tgtgttcaga tctcttatgt tataattaga tcagagactg 780
gtagcatcgt ttctctctct gaaagcacca gtgcccagag tctgctcggg aataaaatta 840
tggatccaga ttgttctgag agacgaagat acttgctgct gatagagggtg aaaacgagat 900
tgatccgtct ggggttttac ggtgtgcact ggggtgctgca cagacttgct aagggttgcy 960
acgtccyckg ggcactgcma aaggcccgcc cccgggntgt tgtaaaaatg tagccaaaga 1020
ntatttaaac atcccaccaa ccaaacac 1048

```

<210> 81

<211> 1136

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1124)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1131)

<223> n equals a,t,g, or c

<400> 81

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gcactgatat ttgtcattga ctcacaggat gattacatgg aagccctggc caggctccac 180
ctcacggtga ccagggccta caaagtgaat actgacatca acttcgaggt gtttattcat 240
aaagtggatg gtctgtcaga tgaccacaaa attgaaaccc aaagagatat tcaccagagg 300
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caactcccaa ctctggagaa tttgtgaac atctttatct caaattctgg aattgaaaag 480
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aagcttaata atacaaccgt gctttattta aaagaggtga caaagttcct ggctctcgtt 720
tgctttgtca gagaggaaag ctttgaaaga aaagggctaa ttgactataa ttttcattgc 780
ttccggaagg ccattcatga agtttttgag gtgagaatga aagtagtaaa atctcgaaag 840
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taaaaaaaaa aaattcctgc aaccctcttg atcttctctt ttataaataa agtaagcact 1080
ttgaagcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaangggggg ncccc 1136
```

<210> 82

<211> 297

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (28)

<223> n equals a,t,g, or c

<400> 82

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ctccctcgct gtgtgaagtt gcaccctgag tgcgggatca gcggaggagt tcaacgagag 180
attcctgagg attgcagtct ataaacttgg tgcaggcggc tgaccccgca gctyaacaag 240
atcaagaggc tgataatcaa gccctcagc ccgaaactca ggctgctcag ggaaaaa 297
```

<210> 83

&lt;211&gt; 2150

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 83

```
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agctctttcc ccgtcagcat cccagccgtg ctcacgcaga cggactggac tgagccctgg 180
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ctccaggggg atgttcattt ctatagtatt ttcagcccca ctgctgggtg atgccatgat 420
cattgtggtt atgtgggtat ggaagacttt gaatgtgatg actgacctga agaatgcaca 480
agagagaaga aaggaaaaga aaaggagaag gaaagaagac tgagggggcag cagctgcttg 540
gagtttgctt ccttcccgtc caccagtgct agctcccagt gctgcagtgt gctgtggcgtg 600
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taaaatacac aatataaaat atgaaactca ataataaaca gtgccacctg tacatgggca 900
ccatgccctc ctctcgtgct tgtgttttct agtgcctgcc acagttcgca gtagaggggtg 960
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cagccgcctc acagacaatg acttgacatg aaatgtcagc tgtgctgggg gcagagagac 1140
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aatactgatt gtgcattgta tctggatagc atgcctaatt gtgcatttct gaaagttacc 1560
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tcaattaaac ttcttggtta taaagtaaaa aaaaaaaaaa aaaaactcga 2150
```

&lt;210&gt; 84

&lt;211&gt; 601

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (66)

&lt;223&gt; n equals a,t,g, or c



&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (505)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 84

```

ttgtgtgcc  ggggtgggtcc  ccagaaggag  ctgatctgaa  caggccggag  agtaggaccg  60
gccgtnacac  cccacacacct  ccagcctcgg  cccactcct  tgggctctta  aggtcctgcc  120
tcaagaacca  cttcctgagt  cttagtgtat  gtgtgtacaa  aagaatgaaa  gaagtctcta  180
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cgktggcary  tggtttaagc  tcagngggca  gggaaaggga  agaggagaat  ggttttcacg  540
gagcagaagg  ttgtgctcaa  ggtggacctt  ggagaataaa  ggggagagct  ccagggaaca  600
g                                                    601

```

&lt;210&gt; 85

&lt;211&gt; 534

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 85

```

cgcgctcgacg  ttcctcctaa  ctctgcccag  aaacrgctct  cctcaacatg  agagctgcac  60
ccctcctcct  ggccagggca  gcaagcctta  gccttggtct  cttgtttctg  ctttttttct  120
ggctagaccg  aagtgtacta  gccaggagt  tgaagtttgt  gactttgggt  tttcggcatg  180
gagaccgaag  tcccattgac  acctttccca  ctgaccccat  aaaggaatcc  tcatggccac  240
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gaagcacaga  cgttgaccgg  actttgatga  gtgctatgac  aaacctggca  gccctgtttc  420
ccccagaagg  tgtcagcatc  tggaatccta  tcctactctg  gcagcccatc  ccggtgcaca  480
cagttcctct  ttctgaagat  cagttgctat  acctgacctt  tcaggaactg  ccct          534

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&lt;210&gt; 86

&lt;211&gt; 1037

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 86

```

tgctgactca  tctatagaag  gaaactacac  tctgagagtt  gattgtacac  cgctgatgta  60
cagcttggtg  cacaacctaa  caaaagagct  gaaaagccct  gatgaaggct  ttgaaggcaa  120
atctctttat  gaaagttgga  ctaaaaaaag  tccttcccca  gagttcagtg  gcatgcccag  180
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aatatcacct  cactgtggcc  caggttcgag  gagggatggg  gtttgagcta  gccaatcca  420
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tctacagtat  ttctatgaaa  catccacagg  aaatgaagac  atacagtgtg  tcatttgatt  540
cacttttttc  tgcagtaaa  aattttacag  aaattgcttc  caagttcagt  gagagactcc  600

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tctatgctcc aagcagccac aacaagtatg caggggagtc attcccagga atttatgatg 780
ctctgtttga tattgaaagc aaagtggacc cttccaaggc ctggggagaa gtgaagagac 840
agatttatgt tgcagccttc acagtgcagg cagctgcaga gactttgagt gaagtagcct 900
aagaggattc tttagagaat ccgtattgaa tttgtgtggt atgtcactca gaaagaatcg 960
taatgggtat attgataaat tttaaaattg gtatatttga aataaagttg aatattatat 1020
atagttaaaa aaaaaaaa                                     1037
```

<210> 87

<211> 597

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (582)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (586)

<223> n equals a,t,g, or c

<400> 87

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gctatttcat acctaattgag ggagttccag gagattcaac caggaaatgc atggatctca 180
aaggaaacaa acaccaata aactcggagt ggcagactga caactgtgag acatgcactt 240
gctacgaaac agaaatttca tgttgcaccc ttgtttctac acctgtgggt tatgacaaag 300
acaactgcca aagaatcttc aagaaggagg actgcaagta tatcgtggtg gagaagaagg 360
acccaaaaaa gacctgttct gtcagtgaat ggataatcta atgtgcttct agtaggcaca 420
gggctcccag gccaggcctc attctcctct ggcctcta atgtcaatgat tgtgtagcca 480
tgcctatcag taaaaagatt tttgagcaaa maaaaaaaaa aaaaaaaaaa aaaaaaaaaa 540
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa angggnggcc gctctag 597
```

<210> 88

<211> 474

<212> DNA

<213> Homo sapiens

<400> 88

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ggtgwgtcac agcaaccctc agccaccagc tgttttccat ctgccggcct tcctggggga 180
gagtccttc cagctgtagc ccctgtctat gggaaaagtc tcatgtcctt ttcattcttc 240
```

cccactgcac actgtctctc accctagact ataattcaag tgaatttgac ctccatttat 300  
tggaacaagcc aggsactgtg ctaggrataa tgwaaccat tagacaaatc tgaaagggag 360  
ggatcactag actaaggggt agaaatgtgg agatgggagt aactttctgc atgtctttgc 420  
aggaggcggc atgtgagaaa gctttttgga agagggtggca cctggagctg tgga 474

<210> 89

<211> 1537

<212> DNA

<213> Homo sapiens

<400> 89

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acgacccttt atattgtgag agtggtcaca atttcacttt accctcctgg gccactgagg 180  
acaccatgac taagttgaga gaattgtcag aattgtccct cctgtccctc tatggaattc 240  
acaagcagaa agagaaatct aggcctcaag ggggtgtcct ggtcaatgaa atcctcaatc 300  
acatgaagag agcaactcag ataccaagct acaaaaaact tatcatgtat tctgcgcag 360  
acactactgt gagtggccta cagatggcgc tagatgttta caacggactc ctctctccct 420  
atgcttcttg ccacttgacg gaattgtact ttgagaaggg ggagtacttt gtggagatgt 480  
actaycggaa tgagacgcag cacgagccgt atccctcat gctacctggc tgcagcccca 540  
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cggagtgtat gaccacaaac agccatcaag gtactgagga cagtacagat tagtgtgcac 660  
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ctcttgaagt atatatatca tagcaaataa gtcacttgat gagaacaagc tatttgggca 1440  
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<210> 90

<211> 304

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (33)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (292)

<223> n equals a,t,g, or c

<400> 90

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tgttgcccgg gctgggtatg aactcctgtg ctttaagcgg cctcatgcct cggcttccca 120
aagtgtcag gttgcagcta tgagccaccg caccagcct acattccttc ttatcaccga 180
gaaacagggt gatcttcaca ggtgtaatga gtatgaagg agtgccataa agatattttt 240
tattttttat ttattttatt ttttaatttaa tttttttttt tttgggatgg gngtccttgct 300
ctgg 304
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<210> 91

<211> 369

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (46)

<223> n equals a,t,g, or c

<400> 91

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tccttccacc tcattctccc caagaactgg gattacaggc atgagcaact gcacctgggc 120
catatgcttc ttatagttga agaagtgaag ggtcaatgac ttactaaaa tactattaaa 180
gtaataaagc taggacttag cccaattat tcaccttaa agtccaatac tttcaatata 240
ttaagttgct ctttattata tgaattctaa atatcttttt taccttttgt tatctaattc 300
ggaaatccta tataaatgta taattttata catgctgact gatatccyct ctagtcttgc 360
tatactagg 369
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<210> 92

<211> 315

<212> DNA

<213> Homo sapiens

<400> 92

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gctttttacc ctctccaaac cttctaacc tagcttcatg aatttatgtt actcgcctag 60
agggctctct ataaatatat acatttgtaa cttctgttta atataaataa atcattcttc 120
atagcaagga ttctggcatc agttggagat tctttggatg gatgtgctcc catggagttt 180
ctattttaat gtactaacia cttatgactc gtctatctgt agtatcaatt atatccacta 240
tcacagtaac agtcaccact taatatgyat agratatctc attttaccaa gcaattatgg 300
tatctctgat ttata 315
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<210> 93

<211> 701

<212> DNA

<213> Homo sapiens

<400> 93

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aacattacaa gggcttttat aaaaaaccct ttgttcata tttttccctt taaaatatgt 60
aatgtcaaaa atgactcacc ttttaaaaaat tatgcatgaa aacaggtggg aaacattcag 120
taatcgcgta tttctccaac atcaagacaa ctaaaacaaa tgataaaaat gtttattttt 180
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acactccagc atatcgggtg agtttttaggg atgtgtatga atattttaa attttaattt 240  
cagttttaat gaaagctgaa cttaataggg aaagctagct cttggtaact agcaatgac 300  
aggcattgtt tgcctctgtc aggttttctt atctgtttta ggtacatttt ttcagattct 360  
gattgtttga gttaatgggt gaatttttaa agtttttagt tacttaaaat akgattttta 420  
attcatatt aatttagaaa attcctgtgt ttacttatat tttaaattgt gaaatggac 480  
caatcattag aacagagaga atagtctttt gaaactgaaa tacttttagt ttactgacct 540  
tgtgtaaaga taatatgaag aaccagcttc caaaagaaac cagcatatgg cactataaac 600  
tatttcattt gagcaccatt ctttaccatg gatataatga ttatgtatta tagtggagt 660  
atcatacagk tcccccaaat gtgatgggtc aagggaattt a 701

<210> 94

<211> 459

<212> DNA

<213> Homo sapiens

<400> 94

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aaaaataaaa cttgggtttt tctaaatat ccttgctggg cctattatac ataaaaaaag 180  
gggccacagc ccatttgcaa ggcttctgaa tgaactccat tcattctgta cttggaaatg 240  
tctcttcagc cacaaaaaga acaatagtta taacctaat tctttggtgc catatcagca 300  
gaagaagagc caagagacca ttatgaaaac tctagtaagt tctcttggtg attatataat 360  
gctgtawtca ttgatcatat tkctgtattt aaataagtac attttttaaa acatcataaa 420  
gtggatcagt aatgctgtaa tatcacattt catgtatta 459

<210> 95

<211> 2589

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1056)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2568)

<223> n equals a,t,g, or c

<400> 95

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gaagaagcga gtcagtggcc cgttcaacct gctctgcagc tgctataaat agcctccctg 180  
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gagcgttact cagtgtaca gaggagatgc acacgtcccc actatgttct gtcttgagaa 300  
ggggacaaga gaaagaggaa aaggagccac tgtactttat ttgacaccta cagcgtgcct 360  
tggcactggg ctgagagagg accttcctgc gtgaatcctg tgcggcaggt cttattgcca 420  
taataagtca catcaaagac actgctggtc ataaaacact gttttacata ccatagggaa 480  
aaacgctgcc aatcttaact aagatgctac aactgtacag ttcttccaa tcagagatgt 540  
tcacgtgtga aaaaaaact gtgctactta caatctatga aagctggtrt tatcccactt 600

ggcaggtaag ggaactgagg tcctgtgagt gaagtgacct catgatcaca caacaggaga 660  
tggcagggct gggattcaaa cccgggagtg tctgctgcca catccacac tcccactgcc 720  
tggtccaag tcccaggaag ctcgagactg tgagttttct cccttgaaac tcacctggag 780  
agagtccggg cacctgtgcc tatgtggagg gttccagccc cagccaggcc cctccgctgc 840  
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ttaaaacctg ggaagtgggt tgggaagggt ttgcaactgt cttgagtgt gtgcttttct 2460  
gtgtgtgtg ttttgatttt tgtcttttta tctgttttat attgacataa ttttcctgtt 2520  
taaaaaaata caactttggc ttgttaaaaa aaaaaaaaaa aaaaatttct gcgggtccgca 2580  
agggaattc 2589

<210> 96

<211> 457

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (372)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (384)

<223> n equals a,t,g, or c

<220>

<221> misc feature  
<222> (442)  
<223> n equals a,t,g, or c

<400> 96  
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ggggctggtg gwgactctgc ctacagcacg gggcrtgtgt ccaggctgar cccgctgagc 180  
gtcgacacag tcgctgttgg cctgggtgtcc agcgtggttg tctatcccgt ctacctggcc 240  
atsctctttc tcttcyggat gtcccggagc aagggtatca atactctggc tgaccatcgt 300  
catcgtggga ctgacttttg tggaagtcct tggttactta tcattaactg tgtttctgag 360  
aagttataaa tntggcatct cctnctgcac aacttacctt tgggttataa taatctggtg 420  
accatcgtca cgttggactg antttggggg aagcctt 457

<210> 97  
<211> 516  
<212> DNA  
<213> Homo sapiens

<400> 97  
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attgtgggca tgagctgctg tgcccagcct ccattgttta atatcaactc tcaactcctga 180  
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cctttaatgg cttccctctt tcactctctg agtatgtaac ttgcaatggg cagctatcca 360  
gtgacttggt ctgagtaagt gtgttcatta atgtttatatt agctctgaag caagagtgat 420  
atactccagg acttagaata gtgcctaaag tgctgcagcc aaagacagag cggaactatg 480  
amaagctctc ctgccatctc caagccact tttcag 516

<210> 98  
<211> 314  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (263)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (271)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (299)  
<223> n equals a,t,g, or c

<400> 98

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gttgcggaag ggccacgcgt ccccccagtag gagaatgact ccgattcgtg accctcagcg 120  
ccggtgcatg tcgatcttgg ccccccaggc tgtgatgcag ccagccaggt ctcagggaga 180  
gggaacccag aagcctggca tgctggccaa aggagtcaag gaaacttttg agctatttac 240  
agcttgtagc aattatgtaa agnatactcc nctgaacaaa atttggagca tgtttggtnc 300  
tctctacctg attt 314

<210> 99

<211> 679

<212> DNA

<213> Homo sapiens

<400> 99

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ggtcgattaa agtgcggtac tgcgggattc arccgatttc cttcttcctc tgactgcccg 180  
gaaatatcag ccaaaggcca gcgttctaag gacatatgga attggctatg gataattcat 240  
atgctttcaa tcaacgaagc acatgtaatg gaattccatc tgagaagaaa aacaacttcc 300  
ttgtatcaga agatcatgga caaaaaatct taagtgtact acagaatttt agagaacaaa 360  
atgtctttta tgatttcaaa ataattatga aagatgaaat aatcccgtgt catcgttgtg 420  
tgtagcagc atgcagtgac tttttcaggg ctatgtttga agtaaactg aaagaaagag 480  
atgatggaag tgttaccatt actaatttgt cctccaaggc agtaaaagca tttctcgatt 540  
atgcctatac tggaaaaaca aaaataacag atgataatgt ggaaatgttc ttccagttgt 600  
catcatttct tcaagtttcc ttcctatcca aagcttgcat tgacttttta ataaaaagta 660  
ttaatcttga aaaaaaaaaa 679

<210> 100

<211> 599

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (583)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (584)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (599)

<223> n equals a,t,g, or c

<400> 100

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agccacgccc gcgcgccacc accatgctag gtaacaagcg actggggctg tccggactga 120  
ccctcgccct gtccctgctc gtgtgcctgg gtgcgctggc cgaggcgtac ccctccragc 180  
cggacaaccc gggcgaggac gcaccagsgg agggacatgg ccagatacta ctcrgcgctg 240



cgacactaca tcaacctcat caccaggcag agatatggaa aacgatcyag cccagagaca 300  
ctgatttcag acctcttgat gagagaaagc acagaaaatg tccccagaac tcggcttgaa 360  
gaccctgcaa tgtggtgatg ggaaatgaga cttgctctct ggccctttcc tattttcagc 420  
ccatatttca tcgtgtaaaa cgagaatcca cccatccctac caatgcatgc agccactgtg 480  
ctgaattctg caatgttttc ctttgctatc attgtatata tgtgtgttta aataaagtat 540  
catgcattca aaaaaaaaaa aaaaawaaaa aaaaaaaaaa acnngggggg gggcccgcn 599

<210> 101

<211> 1189

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (232)

<223> n equals a,t,g, or c

<400> 101

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gcgggaggag ataagcaagg acctcagagc cacactgaac gccttcctgt accacatggg 120  
ccaacacagc aacaaattca tgctggctct ggccagcaat ctgcctgagc agttcgactg 180  
tgccatcaac agccgcattg acgtgatggt ccacttcgac ctgccgcagc angaggagcg 240  
ggagcgcctg gtgagactgc attttgacaa ctgtgttctt aagccggcca cagaaggaaa 300  
acggcgcctg aagctggccc agtttgacta cgggaggaag tgctcggagg tcgctcggct 360  
gacggaggggc atgtcggggc gggagatcgc tcagctggcc gtgtcctggc aggccacggc 420  
atatgcctcc aaggacgggg tcctcactga ggccatgatg gacgcctgtg tgcaagatgc 480  
tgtccagcag taccgacaga agatgcgctg gctgaaggcg gaggggcctg ggcgcggggg 540  
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cccctcctac ccctgccttg ccggcccctg cacatttagg atatgctcct ggatggggac 660  
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ccccccaggg caccctctgt tgtaggcact ggctaggag gggcaggcct ccttcctgcc 780  
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gaaggagtgg ggcaggcggtg gtctttgttc tcggctccca cagcagagcc aggtgagggg 960  
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gggccacgga acccggcagg ggtgtctgag gccgcctgt cagctggccg gtccaagcct 1080  
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1189

<210> 102

<211> 251

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (42)

<223> n equals a,t,g, or c

<400> 102

gccaatttga tgaagtgcaa agttcaggcc ggtatgattt tnagtgtctg caaagataaa 60

agcttcgatg atgaagaatc agtggatgga aataggccat catcagctgc atcagccttc 120  
aaggttcctg cactaaaaca tccggaaatc ctgccaacag tgcaaggaag ctggttcagc 180  
aggtggccct aaggttkgag gttstaaatc catttcaatc tgttatgctg gtccatggcc 240  
ttgatattgg c 251

<210> 103

<211> 458

<212> DNA

<213> Homo sapiens

<400> 103

gggaggcttt ctgaattatg ggggcaacat ggggagactg ggctttctgt ggaccatgac 60  
agctccgcag ccgtgctggg ctccctcagct ccactgtcag ggctaggaat tggccacaga 120  
acccccagag ccaaccctgg ggcccactag gaccccaaac acctgtgttt tcattctgcg 180  
tggcctcctg gttccctgga gttctttttt atgctgcctc tgggtgtgagg tcctcagcat 240  
ttaatttggt ctaagtttaa aagctgcaag agcaaaacag aacccccaaa gcctggggcc 300  
cacagctgct gcggctgatc agagatacga cccagagga ccacgtccac cargggccgg 360  
atggacagcc acctattttg tamtccttgt ttcaaaagca acaatagcaa ataacattcc 420  
aaaagttcta tgatragact tcaagacact aggattta 458

<210> 104

<211> 439

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (360)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (402)

<223> n equals a,t,g, or c

<400> 104

tgtgtgtccg cgcaggcgag caccgcgccg gccctgagcc tcccgtctgc tccccacggc 60  
cgcggtgcat gttcgccctc tgccactgtg tgccgagagg caggaggacc atgaaaatga 120  
tccactttcg gagctccagc gtcaratcgc tcagccggag atgagatgca ccatccggct 180  
gctggacgac tcggagatct cctgccacat ccagagggaa accaaagggc agtttctcat 240  
tgaccacatc tgcaactact acagcctgct ggagaaggac tactttggca ttcgctatgt 300  
ggaccacagag aagcaaaggc actgggcttg aacctaacaa gtccatcttc aagcaaatgn 360  
aaactcatcc accatacacc atgtgcttta gagtgaattt anccacatga acccttgaag 420  
attaaagaag actcacaag 439

<210> 105

<211> 233

<212> DNA

<213> Homo sapiens

<400> 105

tcccaaagtg tggggattat aggcattgagc cactatgccc agcctacttt tgtttttaag 60  
aaattgaaac gatatagaaa agtacaaaaga acaacctaat aaacactcat attccccacca 120  
ctcagaatta tcaacttttt atcatttttat catatttgct tcagatcttt ttttttttta 180  
aagaaaagta taacagattt agctaaaagta ccctttgacc aataccccac ccc 233

<210> 106

<211> 704

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (704)

<223> n equals a,t,g, or c

<400> 106

ggcagcgggtg gccgaggcct cttgggttctg cggcacgtga cggtcgggccc gcctccgcct 60  
ctctcttttac tgcggcgcgcg ggcaagggtgt gcgggcggga aggggcacgg gcacccccgc 120  
gggtccycggg aggctagaga tcatggaagg gaagtgggtg ctgtgtatgt tactgggtgct 180  
tggaactgct attgttgagg ctcattgatgg acatgatgat gatgtgattg atattgagga 240  
tgaccttgac gatgtcattg aagaggtaga agactcaaaa ccagatacca ctgctcctcc 300  
ttcatctccc aaggttactt acaaagctcc agttccaaca ggggaagtat attttgctga 360  
ttcttttgac agaggaactc tgtcaggggtg gattttatcc aaagccaaga aagacgatac 420  
cgatgatgaa attgccaaat atgatggaaa gtgggaggta gaggaaatga aggagtcaaa 480  
gcttccagggt gataaaggac ttgtgttgat gtctcgggccc aagcatcatg ccattctctgc 540  
taaaactgaac aagcccttcc tgtttgacac caagcctctc attgktcagt atgaggktaa 600  
tttccaaaat ggaatagaat gtggtggtgc ctatgtgaaa ctgctttcta aaacaccaga 660  
actyaamctg gatmakgtts agaggactat aaactgcctt catn 704

<210> 107

<211> 445

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (426)

<223> n equals a,t,g, or c

<400> 107

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cagtccatgg gccctgactt cttgccttcg tctcaaatag actctgcagc cagccatcta 120  
tgcagcgcgc cagtggcttt gaaatgcaac agaaaccatc acccccggac catgggctcc 180  
atgccagtgg gcaaagcaca ggtgcgttca ctgagttccc agcacatagc tgtggcaggc 240  
acttgggtgat attttgaaat aaaagaatgg aagaatgtgt ccaagctgtg cttccccctt 300  
ctaccttact cagggacatg gtgccctcct ctctggttyc ctgccctgtg ccamcccccg 360  
scccctgcaa gcacagytct tatgtgcaaa gccctgttaa gtgctggagg gattactgat 420  
ggcttngggg aagtggcaat gggat 445

<210> 108

<211> 592

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 108

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accaaaactg cacaaagata gaaacagggg cttctgtgct ccttgagctt cacgtgttaa 60
cctggctccc cagaccaaag accaacaccg caggggtgagt tcctcctctg ccaacagcaa 120
tctttccctt cctctgaggc cagccatccc catcccagga ggcaggggaa gcaagcccgg 180
ggagggcagg agagctccca gctcagtga gacagctccac cggccccgaa gcacctccct 240
tgctcacagc tcrgasccca gcttctccct gctgcmaagr taactgcagc yttcagactg 300
acttccatgc cctctagct agggsgccatc acttcaagtt caggcgccaa aaaccaagaa 360
agtaaatacac acttcataga ctttatattac cttaaaaaat tcctgagttc attcatgtct 420
ccaaaccact agagaacctg aaaattcacc aggaaattgg gcaactgcaa gttatcctgg 480
agactccaga gtcaacactt cattaatatga gaacaatctg gttcatgcgt tgaagctgtt 540
acagtaatca gggcgacatg ggcaggggaa gcgatttttc tgaagctgtg cc 592
```

&lt;210&gt; 109

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 109

```
tcaccttgta gagaagaaag tcaacagata atttctaaat tggaaaatca ggaaattaca 60
gtcattataa gagatatatg gggaggatat aaataccaga ataaaaagat aaaagagatg 120
aaaatagtag tctctgggga gctaaagtct aaaatacaaa ggtgtgaggc agaccttata 180
tactacttaa cttgtatact atttatagcc cagtattctg ttttctagac ctgtccaggt 240
gttaagggat ccaatctatg aaccagcaga gacccaatga ctaaagmcaa actttgctgc 300
aactgaaat cacctggggg aatcttttaa aaagtactga cgctgactc ccaccacaaa 360
acagtctgat ttaattgggc a 381
```

&lt;210&gt; 110

&lt;211&gt; 351

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (253)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (322)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 110

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ctgtccctgc actccgtggc ggaaggcggc tagagcggct ccctctgagc tctccgagag 60
attggctcggg acctgaagcg ttgagggttaa gggcaaggca aggagcaacg aggagttttt 120
cgttacgtta gaaaaatttc gttgcgtgct gaaagcgctt ttacctgtgt tgtatgattt 180
aaccttatga aaatggacag tatttccagt ttacaagtg aggaaagaag attaagaaac 240
ttgcctccgc cangcgtggg ggttcactcc ctgtaatccc agcactttcg gcggccgaag 300
caagcggatc acttgaggtc angagttcga agaccagcct gggccaaaca t 351
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<210> 111  
<211> 1583  
<212> DNA  
<213> Homo sapiens

<400> 111  
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cctgctcctt cctcatcgtg cttgtcaaca aggcgctgct gaccacctac ggtttcccgt 180  
caccaatttt ccttggaatt ggacagatgg cagccaccat aatgatacta tatgtgtcca 240  
agctaaacaa aatcattcac ttccctgatt ttgataagaa aattcctgta aagctgtttc 300  
ctcwgcctct cctctacgtt ggaaaccaca taagtggatt atcaagcaca agtaaattaa 360  
gcctaccgat gttcaccgtg ctcaggaaat tcaccattcc acttacctta cttctggaaa 420  
ccatcatact tgggaagcag tattcactca acatcatcct cagtgtcttt gccattattc 480  
tcggggcttt catagcagct ggggtctgacc ttgcttttaa cttagaaggc tatatttttg 540  
tattcctgaa tgatatcttc acagcagcaa atggagtta taccaaacag aaaatggacc 600  
caaaggagct agggaaatac ggagtacttt tctacaatgc ctgcttcatg attatcccaa 660  
ctcttattat tagtgtctcc actggagacc tgcaacaggc tactgaattc aaccaatgga 720  
agaatgttgt gtttatccta cagtttcttc tttcctgttt tttggggttt ctgctgatgt 780  
actccacggg tctgtgcagc tattacaatt cagccctgac gacagcagtg gttggagcca 840  
tcaagaatgt atccgttgcc tacattggga tattaatcgg tggagactac attttctctt 900  
tgttaaactt tgtagggtta aatatttgca tggcaggggg cttgagatat tcctttttta 960  
cactgagcag ccagttaaaa cctaaacctg tgggtgaaga aaacatctgt ttggatttga 1020  
agagctaaag agtctgcagc aggattggag actgacttgt gactgcgggc tgggggggca 1080  
ttcccagtag gaatgtgaag ccagagggtt cggattcgtg acatccaccc cctgggcaag 1140  
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ctcaagaaat gtactcgggc gacaccttac ctgtggaaag caaatctttt caaaataagc 1260  
cactgggact cggtaggtgg agccccagct gctcttctag ggacctatgg ggccttcgtg 1320  
gcatctctgt gctgtgtgct ggggaggagg ttgatgtaat ggtgactctt ttctgatcag 1380  
caccttgggc gtgattccca aggtcccagc caaagcaaag ggccagttgt ttcagtttaa 1440  
acagacatgt ctttagtcta ataaaattag ttaactgcca gtaaagtat ttgttagctt 1500  
tgatgaaagc tatgttggtg tctttcccta atcatcaaag taaataaaaa atcattttcta 1560  
aaaaaaaaaa aaaaaaactc tga 1583

<210> 112  
<211> 431  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (388)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (408)  
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (422)

<223> n equals a,t,g, or c

<400> 112

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ccggcagcta gagcagctac tgactctggt tcagccatct tcgataaagg caaaaaggta 60
agggaaagtt tccaagcttt aggaagaatt attttttttc aagacgctgt cttccgtact 120
ttcgttatta aacatacggc tcaagtgatc accggtatag acagtgacat cagacatctt 180
tcattagccc tactcaaaaa tggcggcaac gtaatatcct gggccggagt cggttgtaac 240
ccggaagtgc ctttgtaaag gaggggtggt tagacaatcc ggaartggat ggaatgaaga 300
gatgccactt ggcgcccat ggcagctggt agtatcggcg actccgggtm aaggcccgt 360
csagttgcat taccatgggg cagcaccngg ttttaggggc agggacantt ttgttggtca 420
anttgtgct g 431
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<210> 113

<211> 2842

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2040)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2603)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2656)

<223> n equals a,t,g, or c

<400> 113

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cactatgtcg tccccggcgt cgaccccgag ccgccgcggc agccggcgtg gaagggccac 120
ccccgcccag acgcctcgga gtgaggatgc caggatcatc ccctctcaga gacgtagagg 180
cgaggattcc acctccacgg gggagttgca gccgatgcca acctcgccct gagtggacct 240
gcagagccct gctgcgcagr rcgtgctggt ttccagccct ccccaaattgc attcttcagc 300
tatccctctt gactttgatg ttagttcacc actgacatac ggcaactcca gctctcgggt 360
agaggggaacc ccaagaagtg gtgttagggg cacacctgtg agacagaggc ctgacctggg 420
ctctgcacag aagggcctgc aagtggatct gcagtctgac ggggcagcag cagaagatat 480
agtggcaagt gagcagctctc taggccaaaa acttgtgatc tggggaacag atgtaaatgt 540
ggcagcatgc aaagaaaact ttcagagatt tcttcagcgt tttattgacc ctctggctaa 600
agaagaagaa aatgttggca tagatattac tgaacctcta tacatgcaac gacttgggga 660
gattaatgtt attggtgagc cttttttaa tgtgaactgt gaacacatca aatcatttga 720
caaaaatttg tacagacaac tcctctctta cccacaggaa gttattccaa cttttgacat 780
ggctgtcaat gaaatcttct ttgaccgcta cctgactca atcttagaac atcagattca 840
agtaagacca ttcaacgcat tgaagactaa gaatatgaga aacctgaatc cagaagacat 900
tgaccagctc atcaccatca gcggcatggt gatcaggaca tcccagctga tccccagat 960
```

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gcaggaggcc ttcttccagt gccaaagtgtg tgcccacacg acccggttg agatggaccg 1020
cgcccgcat gcagagccca gtgtgtgagg gcgctgccac accaccaca gcatggcact 1080
catccacaac cgctccctct tctctgacaa gcagatgac aagcttcagg agtctccgga 1140
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acttttttca gagaaacgtg tggaaattgt taaggaactt tccaggaaac cagacattta 1440
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aattttgctt cagctctttg gcgggacaag gaaggatttt agtcacactg gaaggggcaa 1560
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gcatcgtgga catatctatt ctactacgg ggatgagtg cacctctcgt aaacggaaa 2460
aagaattagc tgaagcattg aaaaagctta ttttatctaa gggcaaaaca ccagctctaa 2520
aataccagca actttttgaa gatattcggg gacaatctga catagcaatt actaaagata 2580
tgtttgaaga agcactgcgt ccnctggcag wtgatgattt cctgacagtg actgggaaga 2640
ccstgcgctt gctctngaag ccttgtagc aaggaaggct ccctgcatgt cctgcttgct 2700
gcacgccaca tgggtgtggg ctgcatctca gttggccgcc atcagtgtaa atagagctta 2760
aagtcatggt ttggctgcat aaaaattttc taacttgggt tcaatatttg tagtgaagta 2820
tctgttttca tttttttcac gt 2842

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<210> 114

<211> 268

<212> DNA

<213> Homo sapiens

<400> 114

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attttgctgc tgggtgggtg ggctacagca ggctctgga gccacaccag ggcacgggag 60
tgggtgcagg gaccgtcacc gcgccttcac acgcaccata gtgcccggct aattactctg 120
cttttatgag ccaagggtgt cccgaaagt garccagcgc cagcgtctc yaaggtctcc 180
ataccagcc ttcgtccctg cgggtgcccc aagccttgcg cgcattttgc atttgggaaa 240
aaaagtcctg aatgcgaacg tcacccca 268

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<210> 115

<211> 800

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature  
<222> (673)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (794)  
<223> n equals a,t,g, or c

<400> 115  
gcgctcggggc ttcggaggcg tgcgggcttc ggaggcgtgc gggcttcgga ggcgwgcggg 60  
cttcggaggc gtgcgggctt cgggtgccat ggggactcct cccggcctgc agaccgactg 120  
cgaggcgctg ctcagccgct tccaggagac ggacagtgtg cgcttcgagg acttcacgga 180  
gctctggaga aacatgaagt tcgggactat cttctgtggc agaagagaa atttagaaaa 240  
gaacatgttt acaaaagaag ctttagcttt ggcttggcga tttttttac ctccatacac 300  
cttcagatc agagttggtg ctttgtatct gctatatgga ttatataata cccaactgtg 360  
tcaacaaaa caaaagatca gagttgccct gaaggattgg gatgaagttt taaaatttca 420  
gcaagattta gtaaattgcac agcattttga tgcagcttat atttttagga agctacgact 480  
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catgtaattc agntgataaa gtccaagcca gataaggcct taacttgata aaggatgatt 720  
tttttgacaa tattaagaac atagttttgg agcatcagca gtggcccaaa gaccgaagaa 780  
tccatcctta agncaaaaac 800

<210> 116  
<211> 646  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (556)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (592)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (615)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (645)  
<223> n equals a,t,g, or c

<400> 116



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aacaaaggca ttgccatcta caagaaggat ttcttcctgg tgcagaagct ggtgagctgg 60
gctctgtttc agggcaaatg agggccagga gctgcctgtg tgactttggg gctccctctg 120
ccagtgacca atccctctta aaaagcagtc aggtcaatgc tactgagtag cctcagagag 180
aatttcctaa acaatacaag aaagagaaa ataggtctct tttccctttt ggttctaagc 240
atcctttcct cacttcaggg tagggtggcc aagctctggg gtctcaatcc agaaggaggg 300
ctaagtgggc atcagactta aaataggcag gaggaagatg cggaggaggg tggcaaktaag 360
aggtgagcca ttccccagag gaagatgcag ggggagggca ccctgggggtg aaggccactg 420
agagccagca agtgccctgc gactgacctg ggggcctctg cccacttcct ttgaccacaga 480
gttgcccttc agtaactcag ctgttcaagc ccacattccc taagatttat cttgtcctct 540
ctcccatatt cttctnggaa aagcagatgc tttgctaata ccaaggaatt gnattttttc 600
cagccctggt ttcanaaaat ctggggcctt ggggaaaaaa aattnt 646

```

&lt;210&gt; 117

&lt;211&gt; 1534

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 117

```

gcgacctcgg ccataagcgc ctgcgcagtc gcggggccgc cggccgtgct gttcccgcga 60
attcctgtgg taatccttac cgtggcgagt tccgcgctca atggagacgt ttgacccac 120
cgagctgccc gagctgctta aactttatta ccggaggctc tttccctact ctcagtacta 180
tcgctggctc aactacgggtg gagtgataaa gaattacttt caacaccgtg aattttcatt 240
cacattgaaa gatgatattt acattcgcta ccaatccttc aacaaccaga gtgatctgga 300
aaaggagatg cagaaaatga atccatacaa gattgatata ggcgagatg attctcacag 360
acccaatcaa cacaatacag tgaagctggg agctttccag gctcaggaaa aagaactggg 420
atgtgacatt gacatgacag actatgacga tgtgaggaga tgttgtagtt ctgcagacat 480
atgtcctaag tgctggaccc tcatgacaat ggccatacgc atcattgaca gagcattgaa 540
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tatttgagcc ttgtaaaggg tgggtcaagc gttaaaaaga aagttcacct aagtgaaaaa 720
attcaccctt ttatcagaaa atctataaac ataataaaaa aatactttga agaatatgcy 780
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atgtcagcaa aggaatcaat catctactga agagcccttt tagtgttcat cctaaaacag 1080
gtcgcattmc tgtgcctatt gatttgcaga aagtggacca gtttgatcca tttactgttc 1140
cgaccataag cttcatctgc cgtgaattgg atgccatttc cactaatgaa gaggaaaaag 1200
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atggcagaac tatatatgtg tcttaaacct caaagtaaat tttccttgag aaataaaaaa 1500
aaaaaaaaaa aaaaaagtcg agactagttc tctc 1534

```

&lt;210&gt; 118

&lt;211&gt; 339

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

<221> misc feature  
<222> (155)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (307)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (333)  
<223> n equals a,t,g, or c

<400> 118  
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aaacagcatg tgaatgtgta aggagtccaa gggagtcttt ggatgacctg tttcaaatat 120  
gttctccatg cgccattgca agtgggtcttc ggaanacctg gctgaattga caacattatg 180  
tttggagttg aatgtattga attctaagat caaaagcacc agtggracat gtgggaccac 240  
actttgccaa cagtaactct cctgaaattc tgggcttgcc atttcctga aagaagtact 300  
ttttcntcc ggaacttgga aaagagcgaa ggnagagta 339

<210> 119  
<211> 665  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (616)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (656)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (665)  
<223> n equals a,t,g, or c

<400> 119  
aaagagtgtc cctagttgta acagaaactg tcgatgcagg tttatttgga gaaggaattg 60  
tggagagttt gattcatgca tgggagcatt tactttttaca gccaaagacc aaaggtgaaa 120  
gtgctaattg tgaaaagtat gggaaaagta taccagcaag tgctgttata tttgggatgg 180  
cagtagaatg tgcagagata agaagacatc atagagtggg tattaaggac attgctggta 240  
tccatttgcc aacaaatgtg aaatttcaga gtccggctta ttcttctgta gatactgaag 300  
aaacaattga accttataca actgaaaaga tgagtcgagt tcctggmgrp tatttggctt 360  
tgacagagtg ctttgaaatt atgasagtag atttcaacaa ycttcaggaa ttaaaaagtc 420  
ttgcaactaa raarcctggt aaaattggta ttctgttat taaagaaggc atattagatg 480

ctgttggtggt ttggtttgta ctccagcttg atgatgaaca tagtttatcc acaagtccta 540  
atgaggaaac atgttgggaa caagctgtct accctgtaca tgaccttgca gactaccgga 600  
taaaacgtgg ggaccngtga tgatggaatg tcttgtccaa gattgttact taagantcca 660  
gaatn 665

<210> 120  
<211> 622  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (544)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (577)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (603)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (614)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (620)  
<223> n equals a,t,g, or c

<400> 120  
gagggctgcg ggaggcggga ggaaaaagtg gggccggggc tgagttgggc tgacctgtga 60  
aagtctggga aggtctgcga gagaagcgga gtgttttcag ctccggaagt ggcagttgta 120  
aacttcacct cccgggggct ctcccccttc tgtaccctt tgctgtttgt cccctcctc 180  
ccgggtcctg gagtccgtcg tgttccaaca gtttttctc ttattcccgt gggctgctgg 240  
gcctcctttc acccgtgaga cttggarcgg ccctggggtc ttgggtgtca agcacggatc 300  
acgcgagacc cctgagacct caaatcatct aacgtgaagc cacagacatc ttggcaattt 360  
taatcatcaa gaaagaaata tgtcattaag aaatagcagg gtattttgaa agaagttgga 420  
aaacatcatg aatttgaata ctttaagtaa tactgggtgat acccaaaggt tgaagattgc 480  
ctcattggat gtaaaacaaa tacttaaaaa tgaaacagag ttggatatta ctggataatc 540  
tcangaagaa actccattgg gctaaaaaag aaaagntga aataccacca accccatgga 600  
aancttgcaa gctntgaagn ca 622

<210> 121  
<211> 889  
<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (830)

<223> n equals a,t,g, or c

<400> 121

```
ggctgaagcc atcccccttgg ctgatcagcc acatctgttg cagccaaatg ctagaaagga 60
ggatcttttt ggccgtccaa gtcagggtct ttattcttca tctgccagta gtgggaaatg 120
tttaatggag gttacagtgg atagaaactg cctagagggt cttccaacaa aaatgtctta 180
tgctgccaat ctgaaaaatg taatgaacat gcaaaaccgg caaaaaaaag aaggggaaga 240
acagcccgtg ctgccagaag aaactgagag ttcaaaacca gggccatctg ctcatgatct 300
tgctgcacaa ttaaaaagta gcttactagc agaaatagga cttactgaaa gtgaagggcc 360
acctctcaca tctttcaggc cacagtgtag ctttatggga atggttattt cccatgatat 420
gctgctagga cgttggcgcc tttctttaga actgttcggc aggggtattca tggaagatgt 480
tgagcagaaa cctggatcaa tcctaactga attgggtggt tttgaggtaa aagaatcaaa 540
attccgcaga gaaatggaaa aactgagaaa ccagcagtcg agagatttgt cactagaggt 600
tgatcgggat cgagatcttc tcattcagca gactatgagg cagcttaaca atcactttgg 660
tcgaagatgt gctactacac caatggctgt acacagagta aaagtcacat ttaaggatga 720
gccaggarar ggcagtgggt tagcacgaag tttttataca gccattgcmc aagcattttt 780
atcaaatgaa aaattgccma atctagagt tatccnaaa aaaaaatttn ggccccccca 840
aaaacccaaa aaaaaggggc caacccccaa ccaccaaagg gttttttaa 889
```

<210> 122

<211> 132

<212> DNA

<213> Homo sapiens

<400> 122

```
cttgagcccc tgagttgtgg gggtaggggt aagagcatat cccacaagag gccccacagg 60
gagcagagac tgctttaatc cctgctgaca tcacggaaaa gcaacagagc cttttcaact 120
ttgtcactat gt 132
```

<210> 123

<211> 1900

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1879)

<223> n equals a,t,g, or c

<400> 123

```
gcggacgcnt gggaaacagc cgattggaga cgggagccaa ccagggctgc attggagggtt 60
gaaatcacaa agattagaca cttttttaga taggtgttct tcagcaccac tgacaacacg 120
gttctgacag tatttcatga caatggatgg tgacagttct acaacagatg cttctcaact 180
aggaatctct gcagactata ttggaggaag tcattatggt atacagcctc atgatgatac 240
tgaggacagc atgaatgatc atgaagacac aaatggttca aaagaaagt tccagagaaca 300
agatatatat cttccaatag caaacgtggc taggataatg aaaaatgcc aacctcaaac 360
gggaaagatt gcaaaagatg ccaaagaatg tgttcaagaa tgtgtaagt agttcatcag 420
ttttataaca tctgaagcaa gtgaaaggtg ccatcaagag aaacggaaaa caatcaatgg 480
agaagatatt ctctttgcta tgtctacttt aggttttgac agttatgtgg aacctctgaa 540
attatacctt cagaaattca gagaggctat gaaaggagaa aagggaattg gtggagcagt 600
cacagctaca gatggactaa gtgaagagct tacagaggag gcatttacta accagttacc 660
agctggctta ataaccacag acggtcaaca acaaaatggt atgggtttaca caacatcata 720
tcaacagatt tctggtgttc agcaaattca gttttcatga tctgaagaaa tgatggaatg 780
gggagtgtag agaaatgaga gtctgtatga ttctggaaca gagacatcag aaggaaagac 840
tggtgaaaag atgtatcttt gtatattaat agctgtaatg tagcttcctg atgcttgact 900
aattgagggtg ttaattctga cttgagaatc tttttcatga atgattttta agaaaaattt 960
ggatttttaa ggtatttaaa ttttttggt ttgtacgaga gtttgttgct ctgtatgact 1020
cctgtatgca ttgtatattg caatttatta ctgtcagaga tttgtagaca gtttcttatt 1080
ttcatattga atcatgttac ttttgtaatt caagtaagcg gctgggttaa ttcattgatgt 1140
ttgccctttt aataaaaatat aagggtagag ttcattttga atgcaagttg cttttattat 1200
aaatttgagt ttgtcttggt tataccttgc atgataacct agctagattt ctagcatttg 1260
ctgtattttat taaaattatt atttttttgg taaaacatta atagtttaag cagcatcatt 1320
tttttaaaaa atgtaattga ataagtgtga atgcagaagc aaatattgtc tgccctgtta 1380
aacttggtgc ccattaacag tgtttactac gttcatcgtg cctgttaatg tagttttagt 1440
taytgagct tttttaagac tagatttggt tttgagttac atttttaaga atgtgggaat 1500
atatttaagt ttaatgtagt cctagtgtc ttgaaatggg gcccttttca tttggtacat 1560
gatttttttt caaatcatat cttcaagtac tatagtattc tcttacagaa gaggagtttt 1620
atagtctgat ggtaaatgtc ttcattttac ctttttaatt gaaatgtcaa gtttctctgt 1680
acactatgga aaccaagaaa catcagacat cattgcgtgt acagacctt tgcatgggtg 1740
agtggatgaa atggagaaca gagtgagtgc tgtgaacggt gtgaaataga agccaacttc 1800
tagtatgctg tcttcatctc tgcaataaac taaacgtaaa taawrwaaaa aaaaaaaaaa 1860
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1900
```

<210> 124

<211> 1250

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (874)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1169)

<223> n equals a,t,g, or c

&lt;400&gt; 124

```
ggcacgagga ggaaactaac gattccctgc ccacccccac acccagcacc accaacaggt 60
gggcaagctt gccgagaaaa cgcagagggc atcctgtgag cagcaaacac atctgagcct 120
ggaaaagacg cagagaagta aaagatcaaa gtctgattgg caccggctcc cattccgggt 180
ccagcctcca atccgacccc catttcgggt gcagcctcgg acctagctcc ggccctcgggt 240
ctatccgggt gcatcctccc tccctgttcc ggatcttata ttgcgccagc gcctactcca 300
ggatcccgtg gccagacctc aagccatggc tgggtcccttc tcccgctctg tgtccgcccc 360
cccgggactc aggtcctctg ctttgggcgg agcgggggtct ctagccgctg ggtttctgct 420
ccgaccggaa cctgtacgag ctgccagtga acgacggagg ctgtatcccc cgagcgctga 480
gtaccagac ctccgaaagc acaacaactg catggccagt cacctgacct cagcagtcta 540
tgcacggctc tgcgacaaga ccacacccac tggttggacg ctagatcagt gtatccagac 600
tggcgtggac aaccctggcc accccttcat caagactgtg ggcatgggtg ctggagatga 660
ggagacctat gaggtatttg ctgacctgtt tgacctgtg atccaagagc gacacaatgg 720
atatgacccc cggacaatga agcacaccac ggatctagat gccagtaaaa tccgttctgg 780
ctactttgat gagaggtatg tattgtcctc tagagtcaga actggccgaa gcatccgagg 840
actcagtctg cctccagctt gcactcgagc agancgacga gaggtggaac gtgttggtgt 900
ggatgcactg agtggcctga agggtgacct ggctggacgt tactataggc tcagtgagat 960
gacagaggct gaacagcagc agcttattga tgaccacttt ctgtttgata agcctgtgtc 1020
cccgttgctg actgcagcag gaatggctcg agactggcca gatgctcgtg gaatttgga 1080
caacaatgag aagagcttcc tgatctgggt gaatgaggag gatcatacac gggatgatctc 1140
catggagaag ggtggtaaca tgaagagant gtttgaaaga tctgccgagg cctcaaagag 1200
gtrgagagac tatgtagggg actaggtggg aggacataag gaaaacaaaa 1250
```

&lt;210&gt; 125

&lt;211&gt; 1189

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1041)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1136)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1144)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 125

```
cttttttttaa ccttttaggt atctgatcgc tttgccaaatt ttgcgttact gggcaggcta 60
agagatcttc ttttaattca gcctgcttaa gacgggaact gataactgta gtgtatcctc 120
tgcctttttt cttatctatt ggaggaagct cagatgggtg cacaagaagg atctgaagtg 180
gagcttctag tatccccagg agcgcgaagt gaacacggaa ggtacctgca ggatccaatt 240
gtgtccattg atctctcaga gtggctgagg ataataagat ttcttcttca aggtctcaag 300
gtctgaagca tcccacagaa tgatcctact gaataactcc cataagctgc tggccctata 360
```

```
caaatccttg gccaggagca tccctgagtc cctgaagggt tatggctctg tgtatcacat 420
caatcacggg aacccttca acatggaggt gctgggtggat tcctggcctg aatatcagat 480
ggttattatc cggcctcaaa agcaggagat gactgatgac atggattcat acacaaacgt 540
atatcgtatg ttctccaaag agcctcaaaa atcagaagaa gttttgaaaa attgtgagat 600
cgtaaactgg aaacagagac tccaaatcca aggtcttcaa gaaagtttag gtgaggggat 660
aagagtggct acattttcaa agtcagtgaag agtagagcat tcgagagcac tcctcttggg 720
tacggaagat attctgaagc tcaatgcctc cagtaaaagc aagcttggaa gctgggctga 780
gacaggccac ccagatgatg aatttgaaag tgaaactccc aactttaagt atgcccagct 840
ggatgtctct tattctgggc tggtaaata gaactggaag cgaggggaaga atgagaggag 900
cctgcattac atcaagcgtg gcatagaaga cctgccagca gcctgtatgc tcggcccaga 960
ggagatcccc gtctcatggg taaccatggg acccttcttg tgaagtagga atggcctaca 1020
gcatggaaaa ataccgaaga ncaggcaaca tgggcacgag tgatgggtgcg atacatggaa 1080
atatctgcgt cagaaggaat atttccattt ttacatctct gtgttgggaa ggaaantgaa 1140
ggantccccg cagatttgtg gggggcagtt ttggtttctt ttgaggcct 1189
```

<210> 126

<211> 428

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (388)

<223> n equals a,t,g, or c

<400> 126

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gaggtcctga gagactgtra gagccccaac tccattagta ttatgggcct caatacttcc 60
cgggttgcaa ttaccctgaa gccccaagac cctatggaac agaacgtagc tgagctgttg 120
cagttcctgc tgggtgaagga tcagagcaag taccctatcc gggagtctga aatgcgggaa 180
tatattgtta aagaatatcg caaccagttt cctgagatac tcaggcgagc agcagcccac 240
ctggagtgca tttttaggtt tgaattgaga gaacttgacc ctgaggcaca cacctacatt 300
ctgttaaaca aactgggacc tgtgcccttt gaagggttag aagagagccc aaatgggcca 360
aagatggggc tcctgatgat gattctangc caaatattcc tgaatggcaa ccaagccaag 420
gaggctga 428
```

<210> 127

<211> 645

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (255)

<223> n equals a,t,g, or c

<400> 127

```
acgcggtcgg ccgggagccg gggaggagcg tggacgccgg cctggcaggt acccccgcga 60
gaacgtggga gccggtgtat ttcagctgca tttattactg atctcgggct gcaccagggc 120
acttgtagga ccgactaaa aacagcggaa agtgaggagc caagcctggg tccggggcgg 180
cccgccgtac agctggcctc acggattcca ctgcctgcgc ctgcagatga cttgttctgg 240
agagtagaga atgtnctcgg atttaaagta caatccggtt tcctttccat tcattatagt 300
```

tgcctacact caacaaacaa aagttgggaa agataaaggg attattctag cgcgtcacat 360  
tgacaaacac cgacgttaac acgctcagtc cagcctgact cacttgccctc aggtcagaga 420  
ggtcaccact gacgacgccg ggccctcaag ccgatcctaa tccagcttgg ttctctcagc 480  
ctcagccaga ccatccgttc ttgcctctgt cccaccacgt gcaggtgtaa gytccgccg 540  
cacttcttgt ctgaatctgc caaggaagga aactggcatc tttcagctta aattcttttt 600  
cacttgatca ggggtaggag tttaggcggg tttttttttt aagga 645

<210> 128

<211> 496

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (481)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (490)

<223> n equals a,t,g, or c

<400> 128

ctggagtctc aacgacgcgc acacgagaag taaggagcgg aaggtgggaa agggccggaa 60  
aacacacgtt cctccgaaac cggtttgcaa gtccttgtag agagtgatag attcgtgtgg 120  
cctttcaaat gattgtgaag tggtggaat ggatccaaa taataagtga cttctctacc 180  
aaagcataga agattcttca tatctccttc cagtggctca atttagattt tgggaargag 240  
cagaacaagt gaaacacaga aaactgaaga gaagaaatcc tcattttgga cctatatttc 300  
tccttgacta tttcttaata tccatcctac ccacgttct aatgttttaa ctttgctctg 360  
aatttataaa tagtaaaggc caaagacata gaatatacat ttagtagctt tataccaaga 420  
aatttgcctt gaaagctgct gtscgtggag gggaaagtgt agcaaattcc tggcnatttg 480  
naattttaan ttattg 496

<210> 129

<211> 424

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (313)

<223> n equals a,t,g, or c

<400> 129

ctggcgcccg caggagcgcg tgcggcgtgg actttgccgg gctcgccaca cagccccaga 60  
cccgtttagg accgggagac cgaacgcagc gwccagccgg ggagtttcgg cggcgttctc 120



```

cgggcaccgc gcgcggaagc cagacgcagc ggggggacac atctcgcggt ggcgttgcca 180
gagtgaggag ttagcaggca ggacttgacg aggctctttg gtttttctag tcctcaacca 240
ctgaagaaga agcttgatgc ttggctgtca gaagacatga attacgcacg gttcatcacg 300
gcagcgagcg cancagaaac cttctctcca tccggaccat gactgacata ttgagcagag 360
gaccaaatac gatgatctcc ttggctgggt gcttaccaa tccaaacatg tttcctttta 420
agac 424

```

<210> 130

<211> 1709

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (881)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1028)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1061)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1168)

<223> n equals a,t,g, or c

<400> 130

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tggaccgcag cttcctggaa gacacaaccc ccgccaggga cgagaagaag gtggggggcca 60
aggctgcccc gcaggacagc sacagtsatg gggaggccct gggcggaas ccgatggtgg 120
carggttcca ggacgatgtg gacctcgaag accagccacg tgggagtccc ccgctgcctg 180
caggccccgt cccagtgcaa gacatcactc tttcgagtga ggaggaagca gaagtggcag 240
ctcccacaaa aggccctgcc ccagctcccc agcagtgtc agagccagag accaagtggg 300
cctccatacc agcttcgaag ccacggaggg ggacagctcc cacgaggacc gcagcacc 360
cctggccagg cggtgtctct gttcgcacag gtccggagaa gcgcagcagc accaggcccc 420
ctgctgagat ggagccgggg aagggtgagc aggcctctc gtcggagagt gaccccgagg 480
gacccattgc tgcacaaatg ctgtccttcg tcatggatga ccccgacttt gagagcgagg 540
gatcagacac acagcgcagg gcggatgact ttcccggtgc agatgacccc tccgatgtga 600
ctgacgagga tgagggccct gccgagccgc cccaccccc caagctccct ctccccgcct 660
tcagactgaa gaatgactcg gacctcttcg ggctggggct ggaggaggcc ggacccaagg 720
agagcagtga ggaaggtaag gagggcaaaa cccctctaa ggagaagaag aagaagaaga 780
aaaaaggcaa agaggaagaa gaaaaagctg ccaagaagaa gagcaaacac aagaagagca 840
aggacaagga ggagggcaag gaggagcggc gacggcggca ncagcggccc ccgcgcagca 900
gggagaggac ggctgccgat gagctggagg ctttcctggg gggcggggcc cggcgggccg 960
ccaccctggg ggtggcgact acgaggagct ctaggccggc gtgggcagtg gccgccctgg 1020
ggcggggngc gtgcctgtca ctgcctgggg aggcatttgc ntctgtacca tcgcctttgc 1080

```

```
cgctgccccg tggctgccgt gtgcgcttct gagctggaag aggccgggca ttggtggtcc 1140
ccaggctggg ccctgcaggt gctgggcntt cagccyagtg tgagcctgct ctgcaagaag 1200
ggaggggaca gctggcttca gccaggctcg gtggacaccc tggccctctc ggggcagagc 1260
cgccagtgtt tctcagggat gtgactgagg cccaggaggg acctgtgagg gtctgtttac 1320
agaggctggg cagggggccgc ttggtgtggg ggtgtgcgct gccccggcac ctgcttgccc 1380
tccgcgctca tctgggggccg cagcatgcct atggttccgc ttccggccgg gagccctgaa 1440
cacgggtgtg cagactcacc ctaaaggggcg gccaggccc cagcctagaa ggctggcgag 1500
accgaagcag catgtgaggc ctctcctggg agtggggggt gtgtttccca cagtggcctc 1560
agctgcgccc ccgctcaggt gagcccgaag gcaggagccg ggaggcactc ctcccaaaca 1620
ctccactcag accataaagc actcctgttt cactctgaaa aaaaaaaaaa aaaaaaaaaa 1680
aaaaagggcg ccgctcgcgga tctagaacc 1709
```

<210> 131

<211> 866

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (683)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (723)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (740)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (793)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (813)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (841)

<223> n equals a,t,g, or c

<400> 131

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ctcgctcgga ttggttcagt gcactctaga aacactgctg tgggtggagaa actggacccc 60
aggtctggag cgaattccag cctgcagggc tgataagcga ggcattagtg agattgagag 120
agactttacc ccgccgtggt ggttggaggg cgcgcagtag agcagcagca caggcgcggg 180
```

```

tcccgaggagg cccgctctgc tcgcgcgcgag atgtggaatc tccttcacga aaccgactcg 240
gctgtggcca cccgcgcgcg cccgcgcgtg ctgtgcgtg gggcgctggt gctggcggt 300
ggcttctttc tcctcggtt cctcttcggg tggtttataa aatcctccaa tgaagctact 360
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<210> 132

<211> 1593

<212> DNA

<213> Homo sapiens

<400> 132

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aaaaaaaaaa aaaaaaaaaa aaaaaactcg tag 1593

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<210> 133

<211> 408

<212> DNA

<213> Homo sapiens

<220>  
<221> misc feature  
<222> (381)  
<223> n equals a,t,g, or c

<400> 133  
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actgtaccag ttaatctggc gtcagttcgt tgcctgccag atgaccccag cgaaatatga 120  
ctccacgacg ctgaccgttg gtscggggcga tttccgcctg aaagcacgcg gtcgtatttt 180  
gcgttttgay ggctggacaa aagtgatgcc tgcgttgctg aaaggcgatg aagatcgcat 240  
cttaccagca gttaataaaag gcgatgctct gacgctcgtt gaacttacac cagcccagca 300  
ctttaccaag ccgccagccc gtttcagtga agcatcgctg gttaaagagc tggaaaaacg 360  
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<210> 134  
<211> 2741  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1673)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (2736)  
<223> n equals a,t,g, or c

<400> 134  
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aacttgagaa aatcctgtgt ttcagtggaa tgggcagaag gaggtgccac aaagggcaaa 240  
gagattgatt ttgatgatgt ggctgcaata aaccagaac tcttacagct tcttccctta 300  
catccgaaga caatctgccc ttgcaggaaa atgtaacaat ccagaaacaa aaacggagat 360  
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ccactgtctc agagcttcgc atcacggctc aggagaatga catggagggtg gagctgcctg 480  
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aaaaaaaaaa aaaaaaaaaa aaaaaagggg gggggncccc c 2741

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<210> 135

<211> 686

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (638)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (655)

<223> n equals a,t,g, or c

<400> 135

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ttgctgtcsg caccgctgcg ttacccggaa ccgccggg ccgaacagcatg acgtccgctt 300
tgagagaacta catcaaccgt atcctcaagc tggcgccgcg ggcgtgagcc ggggtcgcgg 360
agaggccgcg gtcggggatc ggtgggaggt tgggaggcct ggcctcggcg ggatcctggg 420
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ttcccgcgtgc tgcggggccca rgggtccttt ccattttgcc tgcaaaaccc aaataaaaaac 540  
ccagtgtgat tattccgaac ttttctgtct taaaaaaaat gtacgctctt gattcttact 600  
tactattttcc ctatggcata agtggttaaag tttgtganta agatgaacag tcgtnctggc 660  
ggcgacaaca gtttgcaatc tttgta 686

<210> 136  
<211> 242  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (229)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (242)  
<223> n equals a,t,g, or c

<400> 136  
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gtgaaattag accaggggtc agaacataga ttttagtctc ctttagttca tctactagga 120  
gactaaatta gataatctct aaactccctt ttagttctaa aattctgtaa ttaaactcta 180  
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tn 242

<210> 137  
<211> 545  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (445)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (527)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (534)  
<223> n equals a,t,g, or c

<400> 137  
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gagcccaagg ggaaggtgat ggaacagcat cacatctgca ggctcagtgt tttgtttggt 240  
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tccagtgtct gcaattccaa aatgnccctt ggatggaggg ttggtgagaa tgtcaccaca 480  
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tgccc 545

<210> 138  
<211> 396  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (334)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (373)  
<223> n equals a,t,g, or c

<400> 138  
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tgaggaggga gagggagtta gccagaccag ggtggagatg aggggtattct gagcagcagg 180  
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atgggaactg caggctggcc ccaagcctct gcccgcgtcc tcccttgcat gcagggcctc 300  
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gtgccttgcc ttncaacccg tccgctctgt cctctt 396

<210> 139  
<211> 2771  
<212> DNA  
<213> Homo sapiens

<400> 139  
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aggtaaatc ttgggacctg gagaagaagt aacgagttag ccacgctgta aaaaattgaa 180  
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tgaggggtcat aataatgggtc tcttaaaacc tgatgaagaa aagaaagatc ttagtaataa 780

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<210> 140

<211> 422

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (329)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (392)

<223> n equals a,t,g, or c

<220>



<221> misc feature

<222> (422)

<223> n equals a,t,g, or c

<400> 140

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tatgcaagta tataccacct tacataaacc tcactttaga tatcctcaag tgattgcaca 180
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tatttacgta ttttataaac ctacatttng gkatawgaag tcttttcytt tttttttgag 360
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cn 422
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<210> 141

<211> 1630

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1566)

<223> n equals a,t,g, or c

<400> 141

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tagttcctcc 1630

<210> 142  
<211> 264  
<212> DNA  
<213> Homo sapiens

<400> 142  
accaggatgt ctctgaaatg gacgtcakt ttctgctgat acagctcagt tgttacttta 60  
gctctggaag ctgtggaag gtgctagtgt ggccacaga atacagccat tggataaata 120  
tgaagacaat cctggaagag cttgttcaga ggggtcatga ggtgactgtg gtwracatcy 180  
tcggcttcta ctcygtgcaa tgccagtaaa tcctctgcta ttaaattaga agttttatcct 240  
acatctttga actaaaaatt attt 264

<210> 143  
<211> 636  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (2)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (9)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (260)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (323)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (480)  
<223> n equals a,t,g, or c

<400> 143  
antccaceng gtggaggccg ctctagaact agtggatccc ccgggctgca ggtgcgggca 60  
attcgtcttg cgctggaagg gggtgatgtc aaactggaac aggccgcaag aacactgggg 120  
gccgggeget ggcgcgtttt ctttactatc acgttaccgc tgaccttacc gggaattatt 180  
gttggtacgg tactggcttt tgctcgttct ctcggtgagt ttggtgcaca tcacctttgt 240  
gtcgaacatt cctggtgaan gcggaaccat tccttctgcc atgtataccc tgatccagac 300

```
ccccggcggg aaaagtggag cgcgcagact gtgccattat ttctattgcg ctggcgatga 360
tctccctggt gatttcagaa tggctggcca gaatcagccg tgaacgggcg gggcgtaaat 420
catgctggaa ctgaattttt cccagacgtt gggcaaccat tgcctgacta ttaatgaaan 480
taccgtactt caatccataa agttgcgtta agccgcacgg ttcaaaacgg ctgggcacca 540
gaatgacgtc cgcgcgcgcc ataatgcgat gcgaawatgc tcgtgatagc caatctgaac 600
gccacctga ccgggggtatt tccgtgccgc cgcaag 636
```

<210> 144

<211> 500

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (476)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (489)

<223> n equals a,t,g, or c

<400> 144

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gccagggcag cgcgtccggg agcggagtcg gcgcccgcgg ccgccatgcc ggacagctgg 120
gacaaggatg tgtaccctga gccccgcgc cgcacgcggg tgcagcccaa tcccatcgtc 180
tacatgatga aagcgttcga cctcatcggt gaccgaccgg tgaccctcgt gagagaattt 240
atagagcggc agcacgcaaa gaacaggtat tactactacc accggcagta ccgccgcgtg 300
ccagacatca ctgagtgcaa ggaggaggac atcatgtgca tcaaaktcga ccaagaaatt 360
atcacattat gcaggatcgg ytcaaagcyt ktcagcagag ggaaggacag actaccagca 420
gactgtatca aggaaktgga gcagttaccc aggtggccaa ggctaccagg gaccgntatc 480
aggacctgng ggcctacatg 500
```

<210> 145

<211> 1945

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1934)

<223> n equals a,t,g, or c

<400> 145

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ggcācgaggc tgctgctttc ctctctgtta aagagaatgt tcaaggccga ggacacataa 60
aaaagagcag cattgctggc tctgttattt agctgtgtgt tcttgaaaaa gtcacttctc 120
cagacatatc tcagcattta taacctaaaga ctgaatcact gcattttacc cttaatgagg 180
tacgcttaca ctaatctttt tgaaacagta cttaaattgt agcaggacaa gccgcagaca 240
aaacccctca gccagcgagt ttaagaaaga agggctttat tcggccggga tcttcggcaa 300
gactcacgtc tccaacaacc aagctcccca agtttccggt tctgtcacct ccaggctgag 360
ccgggctggc ggaagaggca cgtgcgctgc tgaatggagc tggctcgctg ttgctacgag 420
```

caggctcctct ttgggttcgc tgtacacccg gagcccgagg cttgcggcga ccacgagcaa 480  
tggactcttg tggctgactt cactcaccat gctcacactg cctccttgtc agcagtagct 540  
gtaaatagtc gttttgtggt cactgggagc aaagatgaaa caattcacat ttatgacatg 600  
aaaaagaaga ttgagcatgg ggctctagtg catcacagtg gtacaataac ttgcctgaaa 660  
ttctatggca acaggcattt aatcagtggg gcggaagatg gactcatctg tatctgggat 720  
gcaaagaaat gggaaatgcct gaartcaatt aaagctcaca aaggacaggt gaccttcctt 780  
tctattcacc catctggcaa gttggccctg tcggttggtg cagataaaac tttagaacg 840  
tggaatcttg tagaaggaag atcagcattc ataaaaata taaaacaaaa tgctcacata 900  
gtagaatggt ccccaagagg agagcagtat gtagttatca tacagaataa aatagacatc 960  
tatcagcttg aactgcatc cattagtggc accatcacaa atgaaaagag aatttcctct 1020  
gttaaatttc tttcagagtc tgccttgca gtggctggag atgaagaagt tataagggtt 1080  
tttgactgtg attcactagt gtgcctctgc gaatttaaag ctcatgaaaa cagggtaaag 1140  
gacatgttca gttttgaaat tccagagcat catgttattg tttcagcatc gagtgatggt 1200  
ttcatcaaaa tgtggaagct taagcaggat aagaaagtcc ccccatcttt actctgtgaa 1260  
ataaacacta atgccaggct gacgtgtctt ggagtgtggc tagacaaagt ggcagacatg 1320  
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aagaaacgag gtttaacagg tgacagtaag aaagcaacaa aagaaagtgg cctgatatca 1500  
accaagaaga ggaaaatggt agaaatgttg gaaaagaaga ggaaaaagar gaaaataaaa 1560  
acaatgcagt gaatcacaga tgtctcctga aagaactctt ttagatgaaa tcattctact 1620  
caaatgtacc ttaatttttt ttttttccct gagtaaaagc aagaaatttc ttcctttgga 1680  
aaaaatatat atattaaaaa accactttta gatggttttt tttaaaaaaa aaaaaaaact 1740  
ggtaaaatta cttttggcag acagtgtttt atgaattatg tatcatgttg atatataata 1800  
tgtaaatgtg tcagttaatt tttactttgt acaaagcaaa taaagatctt tctcaaaaata 1860  
tactgtaaaa taatataaaa tattgaacac attctttatc aaaaaaaaaa aaaaaaaaaa 1920  
ttactgcggt ccgncaaggg aattc 1945

<210> 146

<211> 1114

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1006)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1034)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1055)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1084)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1108)

<223> n equals a,t,g, or c

<400> 146

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agagtgcgct gcgttttcgat gagccgggac gtggcgccrc tctagccagc gcctgggctc 60
tgtggcgggc gccgcagctc cgcgtccccc gcgcctcctc ccagcgcaga cttcaagggc 120
taccactgga cccttccccct gtcttgaacc ctgagccggc accatgcacg gacgcctgaa 180
ggtgaagacg tcagaagagc aggcggaggc caaaaggcta gagcgagagc agaagctgaa 240
gctataccag tcagccaccc aggcctgatt ccagaagcgc caggctggtg agctggatga 300
gtccgtgctg gaactgacaa gccagattct gggagccaac cctgattttg ccaccctctg 360
gaactgccga cgagaggtgc tccagcagct ggagactcag aagtctcctg aagagttggc 420
tgctctggtg aaggcagaac tgggcttcct ggagagctgc ctgcgggtga accccaagtc 480
ttatggtacc tggcaccacc gatgctggct gctaggcsgc ctgcctgagc ccaactggac 540
ccgagagctg gagctctgtg cccgtttcct ggaggtggat gagcggaact ttcactgctg 600
ggactatcgg cggtttgttg ccacacaggc agccgtgccc cctgcagaag arctagcctt 660
cactgacagc ctcatacccc gaaactttct caactactct tcctggcatt accgctcctg 720
tctcttgccc cagctgcacc cccagccgga ttctggacca caggggcgcc tccctgagga 780
tgtgctgctc aaagagctgg agctgggtgca gaatgcttct tctactgacc caatgaccag 840
agtgcctggt tttatcaccg ttggctccta ggccgagctg acccccagga tgcactgcgc 900
tgcttgcatt tgagccggga csaggcctgt ctgactgtct ccttctctcg gscctctta 960
rtgggctyca ggatkgagat cttgctgctc atgggtgatg aatctncccc tgattgtgga 1020
atggaggacc ccanatggca ggaaccggg ccaanctgtc tggatttcca agatggtggg 1080
gcanaaattg ggctggggca aggtcgntg gaaa 1114
```

<210> 147

<211> 546

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (433)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (486)

<223> n equals a,t,g, or c

<400> 147

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ctcgggctga gtagtggcgt ggccgtgagg tccctgcgcc tgcgccctgg atggtcctgg 60
tgccgctccc gccttcgcag ccagcgcggg cttacctagt gttaagtctc tcttcttggg 120
tgccccacgc ctaagcgacc tatgcttctt gttcttctga aatcttacag tcccccttag 180
atgtaggttg gctattggta gcttccgatt cagataagtt tggaacttga cagatgtttt 240
cggggggctg ctttagagag aggccttggg ctatgcaagg ggaggaagga ggttcagaaa 300
aacggggctg gggggctcggc aggacgactc ttraartgtg gaaggtggaa gctgggaggg 360
gagataaagg gcaccraaga ccagcttggt tgctcctatc aaggtgatcc tttccagagc 420
aagagccata tgnatgtcta gtcgcacgag tttgtgcaa gtcctttgca aaaaccttca 480
```

gatgtnggat ctcatgtaat cttgaagaca tcttagtcgt cctaagggtt aattatttaa 540  
ttgatg 546

<210> 148

<211> 1763

<212> DNA

<213> Homo sapiens

<400> 148

ccgacccag ccctagcctc tggggcattg tctgcccttc gccgtcggcc ctccgcctag 60  
ccgcgcactt cccgccctcc caccttcctt tcgcccttcc accakacctc cctcgacgcc 120  
cgacagctgc tctgggtact gtttcgggtt caggggtgacc tctgggggtga ggaaactgcg 180  
actgggagcg ggacccaggc gtgcagcatt cgccatgctc cgctcacgcg tgggagactg 240  
ggctgtgggg taccggcccg gaaagcacgc agcctccaaa gccgccttcc tcagggaat 300  
ttgcgtgacc ttactgccct ccgtctacag gccttgtacc tctccaggcc gatttttcca 360  
caatttaaat cccagttcac ctggtatcca gctccagcaa cttagagcgt ttcacgtcac 420  
gccgggcgcc aggcgtcggc ttgtataacc tgaaaacgct cctgtttttc tcatctgtgc 480  
agtgggtttt gattcccacc atggccatca cccagtttcg gttattttaa ttttgtacct 540  
gcctagcaac agtattctca ttcctaaaga gattaatatg cagatctggc agaggacgga 600  
aattaagtgg agacaaaata actttgccaa ctacagttga ttattcatca gttcctaagc 660  
agacagatgt tgaagagtgg acttcctggg atgaagatgc acccaccagt gtaaagatcg 720  
aaggagggaa tgggaatgtg gcaacacaac aaaattcttt ggaacaactg gaacctgact 780  
attttaagga catgacacca actattagga aaactcagaa aattgttatt aagaagagag 840  
aaccattgaa ttttggcatc ccagatggga gcacaggttt ctctagtaga ttagcagcta 900  
cacaagatct gcctttttatt catcagtctt ctgaattagg tgacttagat acctggcagg 960  
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gacagcagaa actagcagac agagaaaaga gagcagccga acaacaaagg aagaaaatgg 1080  
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aacacatgtt caaattttat catgccagta ggagaaatct cagctccaca acccaagcaa 1200  
catttgtatg gatttaagag tattttaaga agacatactg cttgatttta atacattgat 1260  
caggccatcc aggacaccac gattctccca aagtaccttg aactcttagt gattgagact 1320  
caaaaaaaca aaaaagactt gagacaatgt tttcttcaac atgctccaaa tataagacat 1380  
ttgtttgctg tacagaaagt atcacaatg gaatatatca gtacctctca agctagtgtt 1440  
tctagctaaa taaatgggtg tatataattt tatggtggaa aagaactgta ctgtctgtta 1500  
tgatttcctt caatgtgcat aatgataaaa taaataattt taatattctt ttgtttccat 1560  
ggttacctga cctaaattag ataaattgta gggctttagc tttcttattt ttgtcaaaag 1620  
ttggtgttga catacatttc ctctaatttg aactgggtatt gtttacgttt gatacaacat 1680  
taaggaattt gatgattttc atttcatgaa aatgacatta aatgcaataa ttttacttat 1740  
cataaaaaaa aaaaaaaaaa aaa 1763

<210> 149

<211> 371

<212> DNA

<213> Homo sapiens

<400> 149

aattcggcac gagcagactt gagagcaata aatgcaaacc taaatgagaa aatggaatcc 60  
ctgacagctg tgtccgtatc aagcatcagt ctctcaaaca gttgccccag cctgacagtg 120  
ctagtctctg tttaattggt aaaggagact ttgccataat tttcagatga agatgtttcc 180  
caaacactgt ttacagaatg agatgtgact ctacagatac ctcatagaag acaatccaag 240  
atcatacttc attaacttga cagagtacgt gtcttaaagg aagcatcagg aattccaata 300

tttgcmttta aaataactttt twagggcctt ttatattagg ccatgcttgg aaaactggat 360  
tttttttatt a 371

<210> 150  
<211> 432  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (3)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (379)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (408)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (421)  
<223> n equals a,t,g, or c

<400> 150  
atnttcagga atcctcacgc aacccggaag aagcgcaagg gctggaccgc taaacctgag 60  
ggcgcccggc ctgcgcacgg gaacctggac tggaacccta cttgcaggtc cccaacttgc 120  
gtctctyctc tctgtctcta cccagccaa ggacaaagac ttctcctccg gaaggcctcc 180  
cccagctgag ggaacgttcc aggtcytccc tcggccctgg ctgcgcgccc ggtgccggct 240  
ctgacgtggt ttctctctccc ctcaggactg gtcctgctcg ctctcgtgg cctccctcgc 300  
gggcgccttc ggytctctct tctctacgg ctacaacctg tcggtggtga atgccccam 360  
cccgaagga caattttgnt gggccaataa atgggggtttt gaaatttntt gttggatttg 420  
ntgaatgggc tt 432

<210> 151  
<211> 401  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (234)  
<223> n equals a,t,g, or c

<400> 151  
gaaagcaaag ttcaacatca ctggtgcctg cttgaatgac tcagatgacg actcaccaga 60  
cttggacctt gatggaaatg agagcscatt ggccctattg atgtctaacg gcagwacgaa 120

aaggggtgaag agtttatcca aatctcggcg aaccaagata gcaaagaagg tagacaaggc 180  
taggctgatg gcagaacagg tgatggaaga cgartttgac ttggrrtcag atgntgagct 240  
gcagattgac gagagattgg ggaaagagaa ggcgaccctg ataataagac caaaatttcc 300  
ccggaaattg ccccggtgcga accttgctct gacccaacc gagttcgtga accaggagaa 360  
gttgagtttg acattgagga ggatatacaa cagatgaggg t 401

<210> 152

<211> 851

<212> DNA

<213> Homo sapiens

<400> 152

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catacctata tcagacttaa tccttaaaag aagattaatt catggaggac agatgttaaa 120  
tggattggca ggtccaactg taatgaatgc agcaccattt ctctctacga cgtgggtttc 180  
tgcagatgaa agggccacag ccacagctat tgcataatg ctacagttatc ttgggggagc 240  
atgtgcattt ttagttggac cacttggtgt tccagctccc aatgggacat cacctcttct 300  
tgctgcagag agcagcaggg cgcataataa agatcgcata gaggtgtgt tatatgcaga 360  
atgtggagtt gtctgcttaa tattttctgc aacactagct tatttcccac cccgacctcc 420  
tcttctccc agtgttgctg cagctagcca gcgtgagtta tcggagaagc gtttgtagat 480  
tattaagcaa ttttcgattt ttgatgattg ctttagcata tgccatacca cttgggtgtat 540  
ttgctggctg gtctggagtt ctggacttaa ttttaacacc agcgcagtgc agccaagtag 600  
atgctggctg gattggattt tgggccatag ttggaggctg tgttggttga atagctatgg 660  
caaggtttgc agattttatc aggggtatgc tgaaactaat tcttctcctc ctgttttcgg 720  
gagctacact gtcacccacg tgggtcaccc tgamctgttt gaacagcatc acacacctac 780  
ctttaaccac agtgacattg tatgcctcct gtattctcct gggagtgttc ttgaatagca 840  
gcgtgcctat a 851

<210> 153

<211> 1678

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1663)

<223> n equals a,t,g, or c

<400> 153

ctcgtgccgc acagctctgg gtgtgggagg gggttgtcca gcctccagca gcatggggag 60  
ggccttggtc agcatctagg tgccaacagg gcaagggcgg ggtcctggag aatgaaggct 120  
ttatagggct cctcagggag gccccccagc cccaaactca ccacctggcc gtggacacct 180  
gtgtcagcat gtgggacctg gttctctcca tcgccttgct tgtgggggtgc actgggtgccg 240  
tgccccctcat ccagtctcgg attgtgggag gctgggagtg tgagaagcat tcccaaccct 300  
ggcaggtggc tgtgtacagt catggatggg cacactgtgg ggggtgtcctg gtgcaccccc 360  
agtgggtgct cacagctgcc cattgcctaa agaagaatag ccagggtctg ctgggtcggc 420  
acaacctgtt tgagcctgaa gacacaggcc agagggtccc tgtcagccac agcttcccac 480  
acccgctcta caatatgagc cttctgaagc atcaaagcct tagaccagat gaagactcca 540  
gccatgacct catgctgcty cgctgtcag agcctgccaa gatcacagat gttgtgaagg 600  
tcctgggcct gccaccagag agccagcact ggggaccacc tgctacgcct caggctgggg 660  
cagcatcgaa ccagaggagt tcttgccccc caggagtctt cagtgtgtga gcctccatct 720



cctgtccaat gacatgtgtg cttagagctta ctctgagaag gtgacagagt tcatgtttgtg 780  
tgctgggctc tggacaggtg gtaaagacac ttgtgggggt gattctgggg gtccacttgt 840  
ctgtaatggt gtgcttcaag gtatcacac atggggccct gagccatgtg ccctgcctga 900  
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cgaagctcga gcctcctgag tctactgac ctgtgctttc tgggtgtggag tccagggctg 1140  
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cgtcctctcc ttcggaacac tggctgtctc tgaagacttc tcgctcagtt tcagtggagg 1260  
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cccaccctgg aagagtggac agtgacacaa ggtggacact ctctacagat cactgaggat 1380  
aagctggagc cacaatgcat gaggcacaca cacagcaagg atgacgtgt aaacatagcc 1440  
cacgctgtcc tgggggact gggaagccta gataaggccg tgagcagaaa gaaggggagg 1500  
atcctcctat gttgttgaag gagggactag ggggagaaac tgaaagctga ttaattacag 1560  
gaggtttgtt caggtcccc aaaccaccgt cagatttgat gatttcctag caggacttac 1620  
agaaataaag agctatcatg ctgtggttaa aaaaaaaaaa aanaaaaaga agtcgacc 1678

<210> 154

<211> 1158

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (449)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (453)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1138)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1148)

<223> n equals a,t,g, or c

<400> 154

ctttatggtg aaagccttac ggagatgtct gtgagtagca tatcttctgc aggctcttct 60  
gtggcctctg ctgtcccctc agcacgaccc cgccaccaga agtccatgtc cacttctggg 120  
catcctatta aagtcacact gccaaccatt aaagacggct ctgaagctta ccggcctggg 180  
acaaccacga gagtgcctgc tgcttcccca tctgtcaca gtattagtag tgcgactcca 240  
gaccggaccc gttttccccc agggagctca agccgaagca ctttccatgg tgaacagctc 300  
cgggagcgac gcagcgttgc ttataatggg ccacctgctt caccatccca tgaaacgggt 360  
gcatttgcaa tgccagaagg ggaacgtcaa ctggtataat aagcaaaatc acatccaaat 420  
ttgttcgcag ggatccaagt gaaggcganc agntggcaga accgacacct caagaagtac 480

```

atcaggggaa ccaaaagaaa gagacaagga agaggggtaaa gattctaagc cgcgttcttt 540
gcggttcaca tggagtatga agaccactag ttcaatggac cctaatagaca tgatgagaga 600
aatccgaaaa gtggttagatg caaataactg tgattatgag caaaaagaga gatttttgct 660
tttctgtgtc catggagacg ctagacagga tagcctcgtg cagtgggaga tggaaagtctg 720
caagttgccca cgactgtcac ttaatggggt tcgcttcaag cgaatatctg ggacatctat 780
tgcctttaag aacattgcat caaaaatagc aaatgagctt aagctgtaaa gaagtccaaa 840
tttacagggt caggggaagat acatacatat atgaggtaca gtttttgaat gtactggtaa 900
tgcctaagt ggtctgcctg tgaatctccc catgtagaat ttgcccttaa tgcaataagg 960
ttatacatag ttatgaactg taaaattaaa gtcagtatga actataataa atatctgtag 1020
cttaaaaaagt aggttcacat gtacaggtaa gtatatgtg tatttctgtt cattttctgt 1080
tcatagagtt gtataataaa acatgattgc ttaaaaaaaaa aaaaaaaaaa aaaaattnct 1140
gcggccgnca agggaatt 1158

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<210> 155

<211> 1969

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (479)

<223> n equals a,t,g, or c

<400> 155

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gccgcacgag cagccagaga cagcgcgacc cggagccgga gccagagcca gagccagagg 60
gaggacgcag ccgcgccggg gcgcagaacg accagctgag caccggggccc cgcgccgcgc 120
cggaggaggc cgagacgctg gcagagaccg agccaggtaa gcggcgaggc cgggggaagg 180
gggcagccca aggcggaccc ccagagctcg ggggtgcagg acgcgggggt ccgcggcgac 240
aggcagaggg accttcccgc ctccgcagcc acgcgcgcgc ccccggaatg aacctgagc 300
cccagcgtca gggcggcgca ggattctgac accgcaggat tcgcccggtt ccgtgccttc 360
cgttcccttg ggctcagaag ccggcgcgac tgcagcgcca ccgccttcca ccgtcccagg 420
agcggatccc gcccgcgcgc acccgcgac ggcgccagcc ccccggtagt tatgagaant 480
aataataact tattaacagt gacaaagcag ggggtgacca gcaaagcctc cgtgtgcttc 540
ccaatcccgt gggcagtaaa gcggtatatt cgggggtccc tccggtgtcc aggagagaga 600
gtccacttat tttctttcct gtcacttctg atgaggcgac cgaacgcctc gtttagcgaa 660
gaggggaatta aagcccagaa tgagcctgcc tctgcgtctc cagtggcaca agccctctct 720
tgcccacctg gatcctaaca ccgatgtct tttgggtctg ccttcccggg tatcttgctt 780
cacggcattt tccctgcctc cctctcccgc ctctcctcag cacacagatc cagaatcccc 840
atataattct actagacagt agggagaaaag ttcaaccacg aaacgtctct aactttgggt 900
tcttgatgat tcttagcaaa tgaatgcgta ataaacatat ttactcactc ttcactccgg 960
agagctcctt agtcatgtga aaaaagtga atgtatccac gatgacagt ggctgtttgt 1020
tcactcacta aagagataag ggtggattga attctgttct cttccctgct aacatgtaac 1080
ttttgtcttc ccatccctcc ttcccactc tcctttccag aaaggcactt ggggtcttat 1140
ctgttggaact ctgaaaacac ttcaggcgcc cttccaaggc tcccccaaac ccctaagcag 1200
ccgcagaagc gctcccagc tgccttctcc cactcagg tgatcgagtt ggagaggaag 1260
ttcagccatc agaagtacct gtcggcccct gaacggggccc acctggccaa gaacctcaag 1320
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cagctctcct cggagctggg agacttgagg aagcactcct ctttgccggc cctgaaagag 1440
aggccttctc ccgggcctcc ctggtctccg tgtataacag ctatccttac taccataacc 1500
tgtactgcgt gggcagtgga gccagcttt tkggtaatgc cagctcaggt gacaaccatt 1560
atgatcaaaa actgccttcc ccagggtgtc tctatgaaaa gcacaagggg ccaaggtcag 1620

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ggagcaagag tgtgcacacc aamgctattg gagatttgcg tggaaaakctc agattcttca 1680  
ctgggtgagac aatgaaacaa cagagacagt gaaagtttta atacctaagt cattcctcca 1740  
gtgcatactg taggtcattt tttttggttc tggctacctg tttgaagggg agagagggaa 1800  
aatcaagtgg tattttccag cactttgtat gattttggat gagttgtaca cccaaggatt 1860  
ctgttatgca actccatcct cctgtgtcac tgaatatcaa ctctgaaaaga gcaaacctaa 1920  
caggagaaag gacaaccagg atgaggatgt caccaactga attaaactc 1969

<210> 156

<211> 400

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (359)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (366)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (398)

<223> n equals a,t,g, or c

<400> 156

aattcggcac gagaagaaaag aaagaatgaa agaaagaaaa gaaaagaaaag aaaggaaaaga 60  
aaaaggaaaag aaagaaaggga aagaaaaggaa agaaagaaaag agagagaaaag aaagaaggaa 120  
aaggaggaag ggaattccag gtatatacca ctgcatgagt aaaggcaggg ttgtggatag 180  
acatagttga tttgtagggc ccttgtttgc caagaatagt cctgctttac ccctgttgtc 240  
ctgatgtaat tattaataat actgcctcat tcagtcttaa ataagtcttg grtttggact 300  
agaaattata tggctaccyc tttatgtggg actaaaagta attccttgrg acmgggacnt 360  
ggagtnaggt gcccaaggaa agctagaagg tagttttntc 400

<210> 157

<211> 722

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (720)

<223> n equals a,t,g, or c

<400> 157

catggtttgg taacctcatg cactgtggga atgtcagagg accccgagat aatgcttcac 60  
tgccaagtct gaaaattgtg tccacaagat ttgattggta gtattttcta tcattgtaca 120  
acttaaaata tcttctaatt tccatttttt ttttttgaca tgagttgtat agaaatgtgt 180  
gcttcagttt ctgttatagc aacaactctt gtcaccata gccttacaaa aattcctaata 240

tttaatatatt aaatttttaga attckacrag cagaattaca aaaagagtaa ctaacaagaa 300  
agttagattg tgatgggata acggaatgtc aagtctaatt gtcaggaaaa gacaaaataa 360  
catgggaatg acaatcaaaa tggactaagg acttagaaga tccgaaacta tgaagctact 420  
aaaagaaaca ttggggaatg ctccaggaca ttgggtctggg caaagatttc ttgagcaata 480  
ccttaaaaagg acaggcaacc caagcaaaaa tggrcagwtg ggwtcmcwtc magctaaaaa 540  
acttctacac agcgaaggaa acaaagtga cagaataaca tgggaatgtt ttctgtaatt 600  
tagtagtaac tggcaatagt ttacaaacac attttgtgta tactgctgtc attgcactga 660  
ttaccttctg ttgtagtgac tttgttctat tagtccactc aattaaaata tttgggtttt 720  
tt 722

<210> 158

<211> 1200

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (274)

<223> n equals a,t,g, or c

<400> 158

taatattcct ttggattcag agaccacaa ctaccagatt gtcaatcatg accaaaagt 60  
gcttctcatc acttctacaa cccacaatg gaaaaagaac cgagtgcag tgtatgagta 120  
tgatactagg gaagatcagt ggattaatat aggtaccatg ttaggccttt tgcagtttga 180  
ctctggcttt atttgccttt gtgctcgtgt ttatccttcc tgccttgaac ctggtcagag 240  
ttttattact gaggaagatg atgcacggag tagntctagt actgaatggg acttagatgg 300  
attcagtgag ctggactctg agtcaggaag ttcaagttct ttttcagatg atgaagtctg 360  
gggtgcaagta gcacctcagc gaaatgcaca ggatcagcag ggttctttgt aaatagtatt 420  
ttgagacact aagatgtttc tactgctacg gratgtattt taaacacata tcgtttcttt 480  
ttcttggaat aaaagttgat taggaccaca gatttggttt agaaagggtat atattttgaa 540  
atactacaag gtttagacag tccatgaatc gacctgttta ataatttacc atcctgaaag 600  
tccagaatta aaatatggaa gcaagaacta tataattgat taggatgctt ggtaggtttt 660  
tttcattgtt caaatattca ttgcacagtg gattgttttg attagttagt atgctttttt 720  
tttaattaat tcagtccttct gttaattttt aagttttggt tagtgccaca aggaatttaa 780  
ctttttgatt tgtataatag aaaactgaac taggaattgt tagcgggggtt ttgaaggatg 840  
tgtactttcc ttcaaaaata agtggttagt tttcaaaatt ttacactagt cagttcttta 900  
tattctaagt taaatgtagt ttgtaaaatt attttggttt tcttctacaa aggaaaaaat 960  
tggatttata tatataaggt tactgcataa tgatttcatt ttgataatgt gcagaatggc 1020  
ctcataagct cacagaaagt aaaaaaaaaa aaaaaaaaaa aagaaaaaat caggattcca 1080  
ctgtttttaa agaaatctca gtttttattt tggaatataa aatgtgtatt tggatatagt 1140  
gaccaatttt ctatcccaaa aaacacccat tcttagtaat gtcatgaatt aaacaccctt 1200

<210> 159

<211> 345

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (316)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (321)

<223> n equals a,t,g, or c

<400> 159

```
ttcggcacga gagaaaagta aaaaaaagaa agaaagaaag aaacaaacaa acaaaacaac 60
tggcatacat atatctccta aatacaggaa gaagtattca taatctcact ctttagcatg 120
gtacaaagct aaccacaact aawttattgt atataargcc acgtgaagtg stgtgtgaca 180
gccttatttt gtgaataggg ctgagaaaac cagttcaa at tctcctgaga ctatttcaga 240
ggrgttaaaa tttgaactcg tttaaaaatc atgrtttatt tacttaatat taagttagg 300
ttaacgggca gaaaangagg ngcctggggg catcacccaa atttt 345
```

<210> 160

<211> 476

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (312)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (377)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (421)

<223> n equals a,t,g, or c

<400> 160

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aattcggcac gagagacacc agagtgaagg agagaggcca tgctgtgtcc gagaagctcc 60
tactgggggtg gaagggacag ctccacaaag gctgctcttg caggggctct cctgcagcaa 120
ggtgcctgct gactgtcccc agactgtctc ccgacacaga gggatgcaaa ggcagcctct 180
tctgtctcag tggaataggg aaattatatc acctttcact tcccactctc acttctgccc 240
ctgtaccct tagtcttttg cttttgctga cattttcccc tcttatcttt tctcctgacc 300
aagttctagg tntttcatag ggcagtcctta ggtgagggtt ggaaccccaa tgaagttggg 360
caacagaaac ccagctnaca atggctgttc actgtgggca agctgtttcc ccttcattct 420
ntaaaagtgg aggtgggggtt agtgtatgag tctgggtttc cattcaactg tgtgtg 476
```

<210> 161

<211> 520

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (512)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (520)

<223> n equals a,t,g, or c

<400> 161

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aattcggcac gagctgcgcg cggctacagc acggttcggt tttccttttag tcaggaagga 60
cggttggtggt gaggttagca tacgtatcaa ggacagtaac taccatggct cccgaagttt 120
tgccaaaacc tcggatgcgt ggccttcttg ccaggcgtct gcgaaatcat atggctgtag 180
cattcgtgct atccctgggg gttgcagctt tgtataagtt tcgtgtggct gatcaaagaa 240
agaaggcata cgcagatttc tacagaaact acgatgtcat gaaagatttt gaggagatga 300
ggaaggctgg tatctttcag agtgtaaagt aatcttggaa tataaagaat ttcttcaggt 360
tgaattacct agaagtttgt cactgacttg tgttcttgaa ctatgacaca tgaatatgtg 420
ggctaagaaa tagttcctct tgataaataa acaattaaca aataaaaaaa aaaaaaaagg 480
ggggggcccc tctaaaaggt ccaagcttac gnacgggtgn 520
```

<210> 162

<211> 339

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (109)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (334)

<223> n equals a,t,g, or c

<400> 162

```
aattcggcac gagcgcgcct ccacgcccag ctaatttttg tatttttggg agagacgggg 60
tttcttcacg ttggctaggc tgatcttgaa ctctgacct caagtggnt gcctgcctca 120
tcctcccaaa gtgctgggat tacaggcgtg acacctgcac ccacccatgc tctagtacat 180
cctaaagaat gccttttagt cctctttcct gacattactc tgcttaaatt cccagattc 240
aagctttttg agaatcctat ctcagcattt tgggcatcag gccatgttat atataggtrc 300
acaacttcta ggccttgttt agttggacag gttnaaaag 339
```

<210> 163

<211> 357

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (343)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (349)

<223> n equals a,t,g, or c

<400> 163

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aattcggcag agcagaacat tggatatgcg cacatgactg tagatcttct cattaataat 60
aggcaacctg gtcagggtgca cgartctagg gttcagaatc caacaggctc aaattcaagt 120
ccagctcagc cacgtggctg atgctgtctg aacctcagcg tcctcagctg ttaaacagag 180
gtaaccatcc ccatctcagc agctttggga ggaaattaaa tgagatatat tggggatcca 240
gataaccaat aaaatatcaa atcactttac cagttcaagc tcttaccact tcagtgattg 300
catgggcttt atcactgacg gatggaactc aggggttcca ggngttcgng acccagc 357
```

<210> 164

<211> 1079

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (303)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (831)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (993)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1058)

<223> n equals a,t,g, or c

<400> 164

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ggcacgagct tggcctccag agtgctggga ttacagggtgt gagctaccgc gcccggccta 60
ttatcttgta ctttctaact gagccctcta ttttctttat tttaataata tttctcccca 120
cttgagaatc acttgtagt tcttggtagg aattcagttg ggcaatgata acttttatgg 180
gcaaaaaacat tctattatag tgaacaaatg aarataacag cgtattttca atattttctt 240
attccttaaa ttccactctt ttaacactat gcttaaccac ttaatgtgat gaaatattcc 300
tanaagttaa atgactatta aagcatatat tgttgcatgt atatattaag tagccgatac 360
tctaaatara rataccactg ttacagataa atggggcctt taaaaaatatg aaaaacaaac 420
ttgtgaaaat gtataaaaaga tgcactctgtt gtttcaaagc gcactrtctt yttttcagta 480
ctacaaaaaac agaataattt tgaagtttta gaataaatgt aatatattta ctataattct 540
aatgttttaa atgcttttct aaaaatgcaa aactatgatg tytagttgct ttattttacc 600
tctatgtgat tatttttctt aattgttatt ttttataatc attatttttc tgaaccattc 660
```

ttctggcctc agaagtagga ctgaattcta ctattgctag gtgtgagaaa gtggtggtga 720  
gaaccttaga gcagtggaga tttgctacct ggtctgtgtt ttgagaagtg ccccttagaa 780  
agttaaaaga atgtagaaaa gatactcagt cttaatccta tgcaaaaaaa naaaatcaag 840  
taattgtttt cctatgrgga aaataacat gagctgtatc atgctactta gcttttatgt 900  
aaatatttct tatgkctcct ctattaagrg tatttactaa aactctgtaa tctccaaaat 960  
attgctatca aattacacac catgttttct atnattctca tagatctgcc ttataaacat 1020  
ttaaataaaa agtactattt aatgatttaa aaaaaaanaa aaaaaagaaa aaaaaaaaa 1079

<210> 165

<211> 1325

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1302)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1313)

<223> n equals a,t,g, or c

<400> 165

ttaaaacaag atacatacat agtataacac acctcacagt gttaagattt atattgtgaa 60  
atgagacacc ctaccttcaa ttgttcatca gtgggtaaaa caaattctga tgtacattca 120  
ggacaaatga ttagccctaa atgaaactgt aataatttca gtggaaactc aatctgtttt 180  
tacctttaa cagtgaattt tacatgaatg aatgggttct tcactttttt ttagtatga 240  
gaaaattata cagtgtttaa ttttcagaga ttctttccat atgttactaa aaaatgtttt 300  
gttcagccta acatactgag ttttttttaa ctttctaaat tattgaattt ccatcatgca 360  
ttcatccaaa attaaggcag actgtttgga ttcttccagt ggccagatga gctaaattaa 420  
atcacaaaag cagatgcttt tgtatgatct ccaaattgcc aactttaagg aaatattctc 480  
ttgaaattgt ctttaaagat cttttgcagc ttgagagata cccagactga gctggaactg 540  
gaatttgtct tcctattgac tctacttctt taaaagcggc tgcccattac attcctcagc 600  
tgtccttgca gttaggtgta catgtgactg agtggtggcc agtgagatga agtctcctca 660  
aaggaaggca gcatgtgtcc tttttcatcc cttcatcttg ctgctgggat tgtggatata 720  
acaggagccc tggcagctgt ctccagagga tcaaagccac acccaaagag taaggcagat 780  
tagagaccag aaagaccttg actacttccc tacttccact gctttttcct gcattkaagc 840  
cattgtaaatt ctgggtgtgt tacatgaagt gaaaattaat tctttctgcc cttcagttct 900  
ttatcctgat accatttaac actgtctgaa ttaactagac tgcaataatt ctttcttttg 960  
aaagctttta aaggataatg tgcaattcac attaaaattg attttccatt gtcaattagt 1020  
tatactcatt ttcctgcctt gatctttcat tagatatttt gtatctgctt ggaatatatt 1080  
atcttctttt taactgtgta attggttaatt actaaaactc tgtaatctcc aaaatattgc 1140  
tatcaaatta cacaccatgt tttctatcat tctcatagat ctgccttata aacattttaa 1200  
taaaaagtac tatttaatga ttaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1260  
aaaaaaaaag gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa angggggggg ggnccaaaaa 1320  
aaaaa 1325

<210> 166

<211> 394

<212> DNA



<213> Homo sapiens

<220>

<221> misc feature

<222> (316)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (341)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (376)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (392)

<223> n equals a,t,g, or c

<400> 166

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aattcggcac gagtttgcac ccaaattggt tgacctttgt gcagtggctc ccattatcaa 60
ctggggaacc agtacaatct ttacctagtt actactgagg ttgttctctc tccatcacia 120
aatttcacgc tatttatctg tgagaaaatg cctgaggact ttcacacagt aattcatctt 180
atctggaacc cttaggatca gatgtagacc gagcaaagt caagttcaca gagaacacct 240
gtgtcttcag aacattaaag ggcaccatta gagcttggtt cccttcaact tacatgcaca 300
tttttggsat aagttngggg ctkratgatg ttgtcatags naatactgct agratgrttg 360
ctgtactcat tcactnccaa aaaagggggg gntg 394
```

<210> 167

<211> 517

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (122)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (215)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (400)

<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (401)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (472)  
<223> n equals a,t,g, or c

<400> 167  
ataattgcgg ctctttctcc tattcagatt ttaccagtg atggaaaaga tcaattttct 60  
tgtggaaatt cagtggctga ccaagccttc cttgattctc tctcagccag cacagctcag 120  
gncagttcgt cggctgccag caacaatcac caggtagctc tcaacttcctc cttctggatg 180  
tggctggctt tacggaaaac agagcgtatt tgtgnaaggc ttgtgatgca ttatagctat 240  
tgccattccc caaaagcaaa aacaaagtcg ctttaggttg ttctgtggca tttctgttgg 300  
gtactaacia agaaatcacc tgttwagcct gataatgact gtttgcaaat ttattataag 360  
agaaaaggca gggatttgag ggttgctttt aggaagtctn nccatgatat ggaacacaga 420  
ccccagaaac ttgcaaatac cctcttaggt taaggcatgg aaagaggagg angagagagg 480  
tcttgtttgt tgaggaggtc catgtcaggc cttggcc 517

<210> 168  
<211> 341  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (335)  
<223> n equals a,t,g, or c

<400> 168  
cttccctcag cccttgggcca acagcattct actttctgtc tctacggatt tracacttta 60  
gtagcctcat gtaggaagaa tcataatact tgtytttttg tgactggctt atttcaactta 120  
gcataatatt ttcaatgttc atccattttg aagctccatg tgagtgggca ggaacttggt 180  
aactggaggc cttcactgag aagtgattaa ggtgatgaat acctgccagt gcagtggctt 240  
cacacctgta ctccagcact ttggggaggc caaggcagga agatcatttg agccccagga 300  
tttsgggacc accttkggca atatagttag acccngtggt t 341

<210> 169  
<211> 350  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (293)  
<223> n equals a,t,g, or c

<220>  
<221> misc f ature

<222> (305)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (311)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (314)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (338)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (343)

<223> n equals a,t,g, or c

<400> 169

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ttcggcacga ggtcttgact cctaccccc tacaacacat ataaaatcag ttccagatag 60
atcacacatc taaatgtgaa atgcaaaata ataaagcttt aagaaaaaaa gtaatggaac 120
catcttcatt atcttagagt aagtagagat ttattaagta ggatattaaa ggaacactat 180
aaatttaggg aaaaaatcaa tatattgatt atattaaaaa taagggaactt ttcctcatta 240
agaggccaca aagtatttgt agtatacaca tccaacaaaa gttccatatt ccngaattwtw 300
tgganggaat nccnatggta cgtaaataaa aggccagncc cangggggggg 350
```

<210> 170

<211> 441

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (111)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (143)

<223> n equals a,t,g, or c

<400> 170

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aattcggcac gagacatggt gaacctggct tctacataaa atacaaaaaac ttagatgggc 60
atggtggtgt gtgcctatag tcccactact tgtgggggcta aggaggagg ntcacttgag 120
ccccggaggt cgaggctaca gtnagccaag agtgactac tgtactccag ccagggaag 180
agagcgagac cctgtctcaa taaataaata aataaataaa taaataaata aataaataaa 240
```

taaaaaaaa caaagttgat taagaaagga agtataggcc aggcacagtg gctcacacct 300  
gtaatccttg ctttttggaa ggctgaggca ggaggatcac tttaggcctg gtgtgttcaa 360  
gaccagcctg gtcaacatag tgagacaytg tytytaccaa aaaaaggaag gaagggacac 420  
atatcaaact gaaacaaaat t 441

<210> 171  
<211> 403  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (399)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (401)  
<223> n equals a,t,g, or c

<400> 171  
ttttcatgaa cctcttccct gggaaacctt atgactcaac agtcaaaggt gtccgaatag 60  
taaagatggg ttctagtgat caggctctgtg cccatgcctg gccttgata gactctgaaa 120  
tgagattctt tgtttgattg atgggggtgat ggtttctggt gtgtacattt gaaggaaacc 180  
agtttcccca cccaaaattt ctaaggagtt taatctttgg ggtrtagggg agttaacta 240  
cactgagtca aggaagtaat tgattgcata ttctctctaa aagtcagcta tggrrtgata 300  
ttgactaaaa caaactagca gttctcttcc accaccaagt cmgagcgtct gttcaccatt 360  
ctgcatgggt aaaagracc acttagggat gggtaatgnt ncc 403

<210> 172  
<211> 984  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (48)  
<223> n equals a,t,g, or c

<400> 172  
caagatattt acttccgctc caaacaaga tgggccagct aacgagcncg ggggaaacat 60  
ccgcccggaa ggccacttga aggcacttcc gccctctctt aacatggagc cggcggagg 120  
gggtggtgtag ggccggcgga taatggcggc gtcgaggctg gagctaaacc tgggtgcggt 180  
gctatmccgc tgcgaggcga tggcagcgga gaaacgggac ccggacgagt ggcgcctgga 240  
gaagtacgtg ggagccctag aggacatggt gcaggccctg aaggctccacg cgagcaaacc 300  
ggcctctgag gtgatcaatg aatattcctg gaagggtgag tttctgaagg ggatgctgca 360  
agccgagaag ctgacctcct cctcagagaa agcactggcc aaccagttcc tggcccctgg 420  
ccgtgtgccca accacagcca gagagcgagt gcccgccaca aagacggtgc atctgcagtc 480  
acgggcgcggt tacaccagcg agatgcggag tgagctacta ggcacggact ctgcagagcc 540  
tgaratggac gtaaggaaga gaactggagt ggcaggggtcc cagccagtga gtgagaagca 600  
gtcggcagct gagctagacc tcgtcctgca gcgacatcag aacctccagg aaaagctggc 660

ggaagagatg ctaggactgg cccggagcct caagaccaat accctggccg cccagagtgt 720  
catcaagaag gacaaccaga ccctgtcaca ctactgaaa atggcggacc agaacctgga 780  
gaaactgaag acggagtcag agcgtctgga gcagcacacg cagaagtcag tcaactggct 840  
gctctgggccc atgctcatta tcgtctgctt catcttcatt agcatgatcc tcttcattcg 900  
aatcatgcct aaactcaaat aaagaccccc gcccaaaaaa aaaaaaaaaa aaaaaaaaaa 960  
aaaaaaaaaa aaaaaaaaaa aaaa 984

<210> 173

<211> 1194

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (16)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (110)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1153)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1175)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1192)

<223> n equals a,t,g, or c

<400> 173

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cgnggcggna anntantggc cccccctaa agggacaaca agctggagct ccaccgcggt 60
ggcgcccgct ctagaactag tggatcccc gggctgcagg caaaagggan aattcaaaat 120
ttagaaaaaa cattagaaat gttaatatgg gatatttttg acttaagaca ttcagaaaaag 180
ttaatgtttt aacacgatat gtgattatag aattctattc atatatgtgt tcacatttat 240
acactttgct atactttgta tttataaata taattctgtt agataaataa gtgattcata 300
ttttgtcaaa actattttta aatttcaata tttaaaatat tttgaaatca ctggttttcg 360
ttaagtggca tcatagrtga gatttgattc catgtagcat ataatttttag attgttcctc 420
tctcacccct tttaaactcc ttcaagcatt gctattactg gggttgcctt tgggaaaact 480
tacttctaga tactaccata tatctgaaat agtagagggt gatgttaata aaattcataa 540
aataatcatg tattactttt tttgatttac cactggaagg aaatacagtc atgtgcaata 600
taatgacgtt ttggtcattg agaccacat gtgtgacagt ggtcccataa ggatgttgct 660
gaaaaattcc tgttgctgcc tagtgacact gttagccatc taacgccata gcacgacacg 720
ttactcacct gttcatgggt atgctgggtg aaacaaactc gtgctgccag tcatacaaaa 780
gtatagcaca atgacaatta tgtacagttt atcataattc ttgataataa atgactatgt 840
tacaggttta tgtattgatt ccactttttg tcattatttt ggaatgtact cctactaatt 900
ataaaaaaga aaagggttaac tgtaaaaaag cctcaggcag gtcccttagg aggcattcca 960
gaagaagaca ttgttaccat aggagatgac agctctatgt gtgttattgc ccctgaagac 1020
cttctagtgg gacaggatat ggaggggaaa gacagtgaac ttgggtgatcc tgaccctgtg 1080
taggcctagg ctaatgtgtg tgtgtcctcg tttttaacaa gaaagtttaa aaagtaaaaa 1140
aaaaaaaaaa ggnctcgaga aaggggcaaaa gggcncttgg gcaaatggca gnac 1194
```

<210> 174

<211> 701

<212> DNA

<213> Homo sapiens

<400> 174

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gcttccactg atcttgccca tctgatgtta ccatgtttgt tgtaaaggaa gagactggca 60
ttctggacaa ctggcatcag agactggctg acatggagaa cccactctgt gtgtgctgag 120
grcagggcac tcaccagtgc agaggcagaa gtgggtgcct gtccctgagg gtttaaccgc 180
tttgccctccc gccacagcc cctccacctt ctaaaagctc aagagatgat cagactgaaa 240
caccgcacca tcttgctggt ctgcctaggc tggaagacct ggcccaggct atggaggccc 300
ctgctccact tgccagattc gcaggagtct tctgaccaga gctgtcgcac cttgctgctg 360
ccactggcac tgttgccatt ctcatcctct tgggggcctt cattggtgcc acattctttg 420
tagccacctg ggctgtcagc catgagggaa ggaccctcgt tttagtctcg gattgtaagg 480
tttccatctc tgtaccttct cacaaagaag agtcagggcc caagcttaat gacctgtttt 540
ttaattcagg aaggtaaata tcgttctctc gtcacacccg gaattacagg tccatttgct 600
ctcagtggga gttgatcttt gattcctaca aagaacaata aagtccggtg aattcccata 660
aaaaaaaaaa aaaaaaaact cggggggggg ccccggtaac c 701
```

<210> 175

<211> 1181

<212> DNA

<213> Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (7)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (24)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (79)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 175

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tgggganatt tccccgaacc ggcnttcccg ggtcgaccca cgcgtccgcg gacgcgtggg 60
ccaaagtgtt gtgtgtgtnt gtgtgagtgg gtgcgtggta tacatgtgta catatatgta 120
taatatatat ctacaatata tattatatat atctatatca ttttctgtg gagggttgcc 180
atggtaacca gccacagtac atatgtaatt ctttccatca cccaacctc tcctttctgt 240
gcattcatgc aagagtttct tgtaagccat cagaagttac ttttaggatg ggggagaggg 300
gcgagaaggg gaaaaatggg aaatagtctg attttaatga aatcaaagt atgtatcatc 360
agttggctac gttttggttc tatgctaaac tgtgaaaaat cagatgaatt gataaaagag 420
ttccctgcaa ccaattgaaa agtgttctgt gcgtctgttt tgtgtctggt gcagaatatg 480
acaatctacc aactgtccct ttgtttgaag ttggtttagc tttggaaagt tactgtaaat 540
gccttgcttg tatgatcgtc cctggtcacc cgactttgga atttgcacca tcatgtttca 600
gtgaagatgc tgtaaatagg ttcagatttt actgtctatg gatttggggg gttacagtag 660
ccttattcac ctttttaata aaaatacaca tgaaaacaag aaagaaatgg cttttcttac 720
ccagattgtg tacatagagc aatgttggtt ttttataaag tctaagcaag atgttttgta 780
taaaatctga attttgcaat gtatttagct acagcttggt taacggcagt gtcattcccc 840
tttgcaactgt aatgaggaaa aaatgggtata aaagggtgcc aaattgctgc atatttgctg 900
cgtaattatg taccatgaat atttatttaa aatttcggtt tccaatttgt aagtaacaca 960
gtattatgcc tgagttataa atattttttt ctttctttgt tttattttta tagcctgtca 1020
taggttttaa atctgcttta gtttcacatt gcagttagcc ccagaaaatg aaatccgtga 1080
agtcacattc cacatctgtt tcaaaactgaa tttgttctta aaaaaataaa atattttttt 1140
cctatggaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 1181
```

&lt;210&gt; 176

&lt;211&gt; 489

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 176

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aatcgctga caggagcgg agttgcagga ggagaytcac cactcacttc agcctgggtga 60
cagrgggagc tctktcttaa aaaaaaaaaa aaaatcatct gtaaaataaa ttccgggata 120
gtcgttttgt tcaaggaaat gttttgtaaa ttgagctcac actatataat ctttattgtc 180
ctatcctgat gtataatata gcaggtataa ttacaccaag cgctatagtt ataaatatgg 240
catgaagtga actatggcct tttatttcct tccagtgtga acacagcagg tgtgagatgt 300
catcttgga gacaggcctt gcagaaatag gcctacatcc aaaatattat cttgtgactc 360
catgaaccat tcattaaccc tttgtatctt tgagtgaaaa ttttactcaa aagttgcac 420
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tggaagttcg aagaaattac ttgaaataaa aataaagatt tctatataga taaaaaaaaa 480  
aaaaaaaaa 489

<210> 177

<211> 253

<212> DNA

<213> Homo sapiens

<400> 177

aattcggcac gagcccggw caggcacaca ggcccaggtg tgtaggccac agcagccgca 60  
gtcctgaaag sctgcaacac ccagacctcc aggagagacc agggccagga tgcctcgctt 120  
gttcttggtc cacctgctag aattctgttt actactgaac caattttcca gaggcagtcg 180  
ggccaaatgg aaggacgatg tkattaaatt atgcggccgc gaattagttc gsgcgcarat 240  
tgccattttg ggg 253

<210> 178

<211> 393

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (214)

<223> n equals a,t,g, or c

<400> 178

aattcggcac gagagcttat tcattgaagg agtaagtggc tgctcactcc tttctgctga 60  
aactctttcc tgccttgta gcctagtgtg gaatgggagc agggtcacag tgaaagagct 120  
gaatctcccc acccaccac actgcagcag gctgcggctg gccgacttgt taattgccga 180  
gcaggaacac agcagcaagc tgcgggcacc cctnacttgc tacagttgat ggctgtgtgt 240  
ctctcccagg acctagagaa aacccgsctt gtgtacgagc gcatactat cggcacattg 300  
ttcatgtcct tcatgaacgr gtaaaactgct gtttccgtgg rttttcaaaa aaaaaaaaaa 360  
aaaaaaaaa aaaaaaaaaa ctcgaggggtg ggc 393

<210> 179

<211> 465

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (377)

<223> n equals a,t,g, or c

<400> 179

attataagcg acgatgggtc tgttgctatg aacacagcag tcggtccctg tcattgtcca 60  
cccaggagtg gccttggtta ttccaagtgg catgtatctt ccctctgagc ttcatttctt 120  
caagatgctc tgggtggtgg gatgggagac catcctgcag ccctcctcag acctatcaa 180  
ttcattgaga gattgcaaag ctgaaagcac ctccggccac tcctgggaga cagacccttt 240  
ggatgatgaaa taaaccagtg acttcagagc ctatgggtct aactgtgctt gaaaaacact 300  
gtctctgaaa acaactttgt gattctccct gctccctgtg gacaaaagca cataattctg 360



ctgttacggg tacttgnstc atacgagctt tcatgttcag catgcaatgg aatcatgctt 420  
gtccatgtga aataaatatg gctctctcgt gtccttaaaa aaaaa 465

<210> 180

<211> 532

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (68)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (140)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (496)

<223> n equals a,t,g, or c

<400> 180

cttgggttca gggaaaccag agattatacc aagacgggtc attctgcgcc atggaaaaca 60  
tccttggnat ttaattgctg ctgacaataa aggtaagggc tgggcttgga tacagcattc 120  
cccagataga gatgctagan aaagtgcata gctatggggc gcacagctct gtttgccttc 180  
atcattgtaa cccgtagaaa gaaaacttga gtaagggtcaa ggtttccatg ctttccttaa 240  
agtgtggagc cttttattcc atgaaaaggc tatacaaaaa tccaggttat caagcaaata 300  
aacaagcagt tcttactcag ataaacaaga tacaccccct caccctacct gctcaatttc 360  
tctttctcca ctcccccaaa cccacctcca ttgtagtcc tgcagggggc cccgtaagyt 420  
tattttgaaa atcactaggg tgggctkggg cgcggtggst tcaggatgtw aatyccagca 480  
ctttgggggrg ggcccnggga aggcagttca ttttggggc aaggggtttt tg 532

<210> 181

<211> 814

<212> DNA

<213> Homo sapiens

<400> 181

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cttgccatat tttaacaagct gcaatttttag aaaagcttta acttaatgat agttttatca 120  
ttgttttctt gtcccaaact tatccagggc catagaagta tgaatctaata taaaacagaa 180  
atgggaatta ttgcacagaa atgggaaata actaatttta aatcagtcaa attggcttct 240  
tattaaatac aataattctt atgraaatca tagtacccta ttttcagaca cagctgccag 300  
tttacacatt tctcagtatc ctgaarggra aaaagtatag ccccrcttat actatgtaaa 360  
attaccaata aaatattttt atgactacag attttgcatt tttgtttaca actattttaa 420  
gagttttatg ttgtatttag aatttcaacc tagaaaccac acagtactta aattctcctg 480  
gggtctcctg ctttctctta accatttgct taatatatat ctacctaaag gagacttctg 540  
aattgtaaat gaacttaaaa atagaatgtg gatgcaaaat atcacataag acatcatgat 600  
aacatttgaa gaaaaaataa aactgtagac cctaacagtt gtgatatttg gtggkttcat 660

gtggtaaatgt aatcttctgk ttaattacag tacttttttac aggcacagtg gkactgtctt 720  
ttttgtaaga tgcyagttgt gaaatacaat taattgcata cagtaaaagt ctgtgattaa 780  
aacatttata tacctcaaaa aaaaaaaaaa aaaa 814

<210> 182  
<211> 317  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (315)  
<223> n equals a,t,g, or c

<400> 182  
taattcggca cgaggaacca ctgttcctta caggtaagcc agcatgatag ttagacaaaa 60  
ccatcccaat agagacttgg catgcattca acaaacatcc cagggtgccta ggggtgtgcc 120  
agcaccattc caggagctgc cagtaaagga aacaagactg ctgtgtggcc aggtgcggtg 180  
gctcacatct gtaatctcag cactttggga atgccgaagt gagtggatca cctgaggtca 240  
ggagttcaag accagcctgg gccaacatgg tgaaaccca ttttttactt aaaaaaaaaa 300  
aacttggggg ggggncc 317

<210> 183  
<211> 243  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (169)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (181)  
<223> n equals a,t,g, or c

<400> 183  
tataaaagaa aaaaaaaggc tgtacaaaaa tttcttttrt acagagactg trtaaaagaa 60  
aaaaaaaaag aaatacmtgt gttcttaaaa ccatttgtat attttcattt ctagaccaca 120  
ctgtagctaa ttattgttat taaatgttaa gataatttaa gtatataana taagtattga 180  
nccgggcatg gtggctcacc cctgtaaatc tcagcacttt gggaaggctg aaggcggggg 240  
gtt 243

<210> 184  
<211> 1148  
<212> DNA  
<213> Homo sapiens

<400> 184  
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ctgtaacact gggctaaaca aagtaagccc tgtttactca gcagtgtttg ggggacatga 120  
agattgccta gaaatattac tccggaatgg ctacagccca gacgcccagg cgtgccttgt 180  
ttttggattc agttctcctg wgtgcatggc tttccaaagg agtggagctg tragttcttt 240  
ggaattgtga acattctttt gaaatatgga gccagataa atgaacttca tttggcatatc 300  
tgcctgaagt acgagaagtt ttcgatattt cgctactttt tgaggaaagg ttgctcattg 360  
ggaccatgga accatatata tgaatttgta aatcatgcaa tttaaagcaca agcaaaatat 420  
aaggagtggg tgcacatctt tctgggtgct ggatttgacc cactgattct actgtgcaat 480  
tcttgattg actcagtcag cattgacacc cttatcttca ctttgagggt tactaattgg 540  
aagacacttg caccagctgt tgaaaggatg ctctctgctc gtgcctcaaa cgcttggtt 600  
ctacagcaac atattgccac tgttccatcc ctgaccatc tttgtcgtt ggaaattcgg 660  
tccagtctaa aatcagaacg tctacggtct gacagttata ttagtcagct gccacttccc 720  
agaagcctac ataattattt gctctatgaa gacgttctga ggatgtatga agttccagaa 780  
ctggcagcta ttcaagatgg ataaatcagt gaaactactt aacacagcta atttttttct 840  
ctgaaaaatc atcgagacaa aagagccaca gagtacaagt ttttatgatt ttatagtcaa 900  
aagatgatta ttgattgtsa gatagggttag gttttggggg gccagtagtt cagtgagaat 960  
gtttatgttt acaactagcc ttcccagtaa aaaaaaaaaa aaaaaaaatt gtaaacaatca 1020  
cttatattac tttattgcag cttcatcacc agtacattat atgttgtaat atttatttac 1080  
ctgatcattt tgatcatttt ctgctttatt ttgctaataa actgtgatgt tacttctaaa 1140  
aaaaaaaa 1148

<210> 185

<211> 1971

<212> DNA

<213> Homo sapiens

<400> 185

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agataagaat cactggcttc tatgcgcttc ttttctctca tcatcatgtt cttttacccc 120  
agtttcctta ctttttttta aattgtttca gagtttggtt tttttttagt ttagattgtg 180  
aggcaattat taaatcaaaa ttaattcatc caatacccct ttactagaag ttttactaga 240  
aaatgtatta ctttttattt tttcttaatc cagtcttgca aaaatgacct ataaatttat 300  
tcatgtacaa ttttggttac ttgaattggt aaagaaaaca ttgtttttga ctatgggagt 360  
caactcaaca tggcagaacc atttttgaga tgatgataca acaggtagtg aaacagctta 420  
agaattccaa aaaaaaaaaa aaaaaaaaaa aaaaagcaaa actgggtttg ggctttgctt 480  
taggtatcac tggattagaa tgagttaaac attagctaaa actgctttga gttgtttgga 540  
tgattaagag attgccattt ttatcttgga agaactagtg gtaaaacatc caagagcact 600  
aggattgtga tacagaattt gtgaggtttg gtggatccac gccctctctc cccactttcc 660  
catgatgaaa tatcactaat aaatcctgta tatttagata ttatgctagc catgtaatca 720  
gatttattta attgggtggg gcaggtgtgt atttacttta gaaaaaatga aaaagacaag 780  
atztatgaga aatatttgaa ggcagtacac tctggccaac tgttaccagt tggattttct 840  
acaagttcag aatattttta acctgattta ctagacctgg gaattttcaa catggtctaa 900  
ttatttactc aaagacatag atgtgaaaat tttaggcaac cttctaaatc tttttacca 960  
tggatgaaac tataacttaa agaataatac ttagaagggt taattggaaa tcagagtttg 1020  
aaataaaaact tggaccactt tgtatacact cttctcactt gacatttttag ctatataata 1080  
tgtactttga gtataacatc aagctttaac aaatatttaa agacaaaaaa atcacgtcag 1140  
taaaatacta aaaggctcat ttttatattt gtttttagatg ttttaaatag ttgcaatgga 1200  
ttaaaaatga tgatttaaaa tgttgcttgt aatacagttt tgcttgctaa attctccaca 1260  
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tatatgtttt gtcccagttg tatagtaatg tttcagttca tcatccagct ttggctgctg 1380  
aaatcataca gctgtgaaga cttgcctttg tttctgttag actgcttttc agttctgtat 1440  
tgagtatctt aagtactgta gaaaagatgt cacttcttcc ttttaaggctg ttttgtaata 1500

tatataagga ctggaattgt gtttttaaag aaaagcattc aagtatgaca atatactatc 1560  
tgtgttttca ccattcaaag tgctgttttag tagttgaaac ttaaactatt taatgtcatt 1620  
taataaagt accaaaaatgt gttgtgctct ttattgtatt ttcacagctt tgaaaatctg 1680  
tgcacatact gtttcataga aaatgtatag cttttgttgt sctatataat ggtgggttctt 1740  
ttgcacattt agttatttaa tattgagagg tcacgagttt ggttattgaa tctgtttatat 1800  
actaaattct gttaaaggag atctctcatc tcaaaaagaa tttacatacc aggaagtcca 1860  
tgtgtgtttg tgttagtttt ggatgtcttt gtgtaatcca gcccatttc ctgtttccca 1920  
acagctgtaa cactcatttt aagtcaagca gggctaccaa cccacacttg a 1971

<210> 186  
<211> 366  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (349)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (353)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (366)  
<223> n equals a,t,g, or c

<400> 186  
aataacaatg taattatttt yggcakascc ttgcctgact tctgaggacc tctaactagtc 60  
tagttctagc cttttagaga tgggtcaactt ctttcatcaa ggctttgggt tcattactgg 120  
tgtctgaatt agttccactc ctagcttgac ccagatttta gtttttatta tggatttttt 180  
cttcaaactt gtttatttaa tattaagttt tcatttttgg cagcatatgg atgattttat 240  
ttttaataat catatctctt agtaaaactaa tggktaaata atattaaagt ataagaggct 300  
aaaattgggc caggtgtggt ggctcacgcc tgtaaatccc cgcactttng gngggctgag 360  
gcaggn 366

<210> 187  
<211> 350  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (341)  
<223> n equals a,t,g, or c

<400> 187  
aattcggcac gagaaagagt tgccaaaaat aaaaaatatt attgtaagggt aaaaaatttc 60  
ataaatgggc ctaatagtgg gatggatata actgaaaact aagatggtga tgaggaagac 120

agtcaagaat aaatataacca aagtagcaaa gaaatacctg tgcaagtaga atagcttgct 180  
tcaaacagat gagatttgct ctccaacat caaaacatat cacaaaacta cagtaattaa 240  
gtccctttga ggccagcact gactgggrta agcaaatagr taaatgggat gtaacaggcc 300  
ttatttcaac taatagggtg ttcaccactc ctagttggtt ncctgtttcc 350

<210> 188

<211> 375

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (27)

<223> n equals a,t,g, or c

<400> 188

aattcggcac gagtgtaaac accttttnata caaatgccat catcccattt ttactgatta 60  
gaaaaacttt gctattaata ggtgcaaagt ccatttcagg tataattggt aaggaactga 120  
gtgcactcat gggaagaaac cttgttttgt tttttgttcg cttttcttct tatccccctt 180  
tctcagtttt atggctggag acatgattta ttgcagccat ccattctggg ggctcatcca 240  
tcacacccgg gttgctagga gattgtggca gcagctgttt gctctgaatc agacagaaaa 300  
gttggtcaatc atcaaaggca ggtgaatagc attagaaaca cgstattgtc agacggaata 360  
attaatcaaa gagag 375

<210> 189

<211> 365

<212> DNA

<213> Homo sapiens

<400> 189

tcagacaaaa attctgtgga cagctgcgag gaattcactt ttctcttgaa actcatagcc 60  
ctctcctgaa tacatatggt gtgcactaac acttgccatt atctgaaact catagcccta 120  
tcctgaatgc atatgctgta ggttaccact tgccattgga ggtcttggag gccatatcct 180  
gtaggagcag ggtagccatg ggacttaact actattatcc cccaaaaatg ttgtgtttgt 240  
gaattcacct gactgaggaa tccctaawta ttcattcagat atttcaaaaag grtccatgtt 300  
ccmaagragg rggtttagta ttgatttttg gttgggtttg ttttatttga ggcagtgggg 360  
gatga 365

<210> 190

<211> 817

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (778)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (791)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (801)

<223> n equals a,t,g, or c

<400> 190

```
ggcacgaggt taattttgaa acttatgctt aagattttaac cagggcagag gcatatttca 60
gcataaataa tggtgccatt ataaactctt atccttccta tctcaacagg aaatgagcaa 120
ttattgcttc atgcttcaat gcaactgtttt aaaataactgt ttaatttggt aaagggtgtga 180
actgtttaat ttatctcaca cgttttttta aacaaataact gattggacat gcgctgcacg 240
ccaggctttg ggcttggtac ctcagggttc tcacagggga ggctggaagt ggaaacaagc 300
acatgtgtaa ctggttggtgta gacagtctaa ttggtagaaa atcagcgaac aaagaagcag 360
acaaattaga aaatgaacgt aagggtgatgt gctaaaaaga gggtagccat tatgtcagtg 420
tccttcagag aaggtagcac tccctgagac cggaatggca gaaagaagtc catcctgcct 480
agcccagctt ggacttggtg agaagcaggc tgataaaaga accaaatatt gtacattttg 540
aagaagttgc ccgctgactt gagagagagg tgttgcgttt cagggtgctga atgtccttat 600
aaaaagttga atatttcgag catctctatc aatacatttg aatgctgaga gcttttcctt 660
ccagaagctc atgtcatttt caacacacac ttctattttac ctttatgtag tttctaaaaa 720
ttgaaaacca gaattggagg tttttttaaa aaaaaaaaaa aaaaaagccg aggkgggnaa 780
agtamaaatg ngcctkwgcc ntttcctttc cccgtcc 817
```

<210> 191

<211> 590

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (569)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (573)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (577)

<223> n equals a,t,g, or c

<400> 191

```
aattagaaag tccaaagtcg acccaaattgg atattatggg cagaagtatg gtagagcaat 60
ccaaacaatt gggattatga atgggaaggt tgtaaaccct atattatttg cgtgtacgaa 120
ggaagaatcc tgtgacaagc acttactcca aaatgagtct acagttatac caagtggata 180
gtagaactta tctactggat ttccgtagta ttgatgatga aattacagaa gccaaatcag 240
ggactgctac tccacagaga tcgggatcag ttagcaacta tcgatcttgc caaaggagtg 300
attcagatgc tgaggctcaa ggaaaaatcct cagaagtttc tcttacctca tctgtgacct 360
cacttgactc ttctcctggt gacctaacct caagacctgg aagtcacaca atagaatttt 420
```

ttgagatgtg tgcaaatcta attaaaattc ttgcacaata aacagaaaac tttgcttatt 480  
tcttttgcag caataagcat gcataataag tcacagccca atgcttccca ttgtaatcca 540  
agttatacct aattttttaac cgggggttng ggnttttnga ttgcaatttg 590

<210> 192

<211> 308

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (285)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (302)

<223> n equals a,t,g, or c

<400> 192

ggcacgagaa ataaccagct gacagcatga cgacaggata aaatccacac ataccattac 60  
taaccttaaa tgaaaatggg ctaaatgctc ccattgaaag acacggggca agctggataa 120  
agaaccaaga cccactggag tatgctgtct tcaagaaacc catctcacat gcggtggcat 180  
acataggctc aaaataaagg aatggagaaa aatatttcaa gcaaattggaa aacagaaaaa 240  
agcaggtgtt gcactcctac tttctgacaa aacagrctwt gcggnttaaa ggkkaaaaaa 300  
gnggaagg 308

<210> 193

<211> 343

<212> DNA

<213> Homo sapiens

<400> 193

aattcggcac gaggcctgga gaacctatgg tgattttcct gggcctgctc attgcccacc 60  
attgaaccaa tcagcacaca tgtcctctct tctgagccca taaaaaccct ggactcagcc 120  
agactcacac agacatcagg actaccagct gcgggaagga gctagccatc tcaggtctcc 180  
ttgaatcatc cagatgacct gcctgtggaa aggagctacc catcacaggt ctacttcctg 240  
atgagaactg gacattcttg ggatgacttg cctgcagaaa ggagcgacat attttgggtc 300  
tyctgagagc tgttctgttg ctcaatgaag ttccttcatg cag 343

<210> 194

<211> 690

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (59)

<223> n equals a,t,g, or c

<400> 194

```

aattcggcac gagaggtgat atacatgata cattctcaag agttgcttga ccgaaagtna 60
caaggacccc aaccgcctttg tcctctctac ccacagatgg ccctgggaat caattcctca 120
ggaattgccc tcaagaactc tgcttcttgc tttgcagagt gccatggtca tgtcattctg 180
aggtcacata acacataaaa ttagtttcta tgagtgtata ccatttaaag aatttttttt 240
tcagtaaaaag ggaatattac aatgttggag gagagataag ttataggagg ctggatttca 300
aaacgtgggc caagattcaa aaatcctatt gatagtggcc attttaatca ttgccatcgt 360
gtgcttggtt catccagtgt tatgcacttt ccacagtggg acatgggtgt agtatagcca 420
gacgggtttc attattattt ctctttgctt tctcaatgtt aatttattgc atgggtttatt 480
ctttttcttt acagctgaaa ttgctttaaa tgatgggttaa aattacaaat taaattgtta 540
atttttatca atgtgattgt aattaaaaat attttgattt aaataacaaa aataatacca 600
gattttaagc cgtggaaaat gttcttgatc atttgcagtt aaggacttta aataaatcaa 660
atgttaacaa aaaaaaaaaa aaaagtcgac                                     690

```

<210> 195  
 <211> 237  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (222)  
 <223> n equals a,t,g, or c

```

<400> 195
tggaatctgg ctagaaagca gtaataaaca gaaatctgta tatgtttgga aaaagtaaatt 60
ctcaatggaa atcagaaaaat attttgaact gaaatttggt gatgaaaata ctatatatgg 120
aaacttggtg gatataattat agctaaagct gtgttagagg aaatttagag ccttacataa 180
atacatatat tataaaaggg aaaatattaa aagttaatgg anctaaggca tccatct 237

```

<210> 196  
 <211> 267  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (46)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (261)  
 <223> n equals a,t,g, or c

```

<400> 196
cccagagta gacacatctt agtatgtact cagctttggg caaaanatag atggcgctcac 60
ctttcttcgc atgctgagct ccatagtaga ttgaggactt gggttggaag cagtaaggta 120
attgccaaaag cccattatc aggtgggtac acatagagct tttgggagga acagatgcca 180
taagttatca gtttagtctt acctctctt tagagggaaa agaagttgga gaaagcgtct 240
gcagctaaca aaaggtactg nccttgg                                     267

```



<210> 197  
<211> 443  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (406)  
<223> n equals a,t,g, or c

<400> 197  
attgccaatg ataaaatttg aactttcaag caaaaatgca aattttggaa aatgtgttat 60  
ttctgccact gagaacataa cagcatacca acacttttag actttttact tttatattgt 120  
ataatgaatg catcaacatt tggatgatct gtattacagg tgaaccaaca ttttccagta 180  
ttagtggtgg ggaatgaccg tgtcwgaagg cttgaccagg atggggatag ctcaaggagg 240  
caggatggct cattgcttat gtcttcttca ggaacacaat gaagtaggtt gagtttccag 300  
gatttgggccc ctgcattggg gatggttgga ggaaaggcca aaaacctagg ttcttycags 360  
ccatgggctt taaaaaacgt ggtacttttt aaggaacagg gttcanggca ggggtgtttt 420  
tggggctagg gttaaggaaa atg 443

<210> 198  
<211> 208  
<212> DNA  
<213> Homo sapiens

<400> 198  
gaaaatgtgc ctttttcagt tgtcacagmt ggggaatgtt actggcatcc ggtgggtaaa 60  
ggctagggat gctgctagac attctacggg gcacaggaca acccccacaa caaagaatta 120  
tctagcccaa aatgtcaaca atgctgaggt tgagaagycc taggaaacta aaacagtgtg 180  
ggggtttgta atttattgga aaccatgt 208

<210> 199  
<211> 258  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (160)  
<223> n equals a,t,g, or c

<400> 199  
attgggtttg gccatgacac tgatttcctg gaggcaaggt gctgcttcya ttcaggaatg 60  
ggggtgcatg actgccctga gcagccaagg agccaattct ttaggaggct gagtgccatt 120  
tcagctcaag ccttcacggg gcagggccaa aagcaacttn gaggggtggg tggagcatct 180  
tccactgcag cttggcccca agaaataggw tgtagcagca gytcagcttg tgggatggtg 240  
cgcaacaatt tggggggg 258

<210> 200  
<211> 893  
<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (870)

<223> n equals a,t,g, or c

<400> 200

```
aggggtagtt tccacaatct aatccgggtg ccatcagagt agagggagta gagaatggat 60
gttgggtagg ccatcaataa ggtccattct gggcagtatc tcaactgccg ttcaacaatc 120
gcaagaggaa ggtggagcag gtttcttcat cttacagttg agaaaacaga gactcagaag 180
ggcttcttag ttcattgttc ccttagcgcc tcagtgattt tttcatggtg gcttaggcca 240
aaagaaatat ctaaccattc aatttataaa taattaggtc cccaacgaat taaatattat 300
gtcctaccaa cttattagct gcttgaaaaa tataatcac ataaataaaa aaatatattt 360
ttcatttcta tttcattgkt aatcacaact acttactaag gagatgtatg cacctattgg 420
acactgtgca acttctcacc tggaatgaga ttggacactg ctgccctcat tttctgctcc 480
atgttggtgt ccatatagta cttgattttt tatcagatgg cctggaaaac ccagtctcac 540
aaaaatatga aattatcaga aggattatag tgcaatctta tgttgaaaga atgaactacc 600
tcactagtag ttcacgtgat gtctgacaga tgttgagttt cattgtgttt gtgtgttcaa 660
atttttaaat attctgagat actcttgtga ggtcactcta atgccctggg tgccttggcc 720
agtttttagaa ataccagttg aaaatatttg ctcaggaata tgcaactagg aaggggcaga 780
atcagaattt aagctttcat attctagcct tcagtcttgt tcttcaacca tttttaggaa 840
ctttcccata aggttatgtt ttccmgcccn rggsatgggg ggtcattggg gcc 893
```

<210> 201

<211> 503

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (480)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (493)

<223> n equals a,t,g, or c

<400> 201

```
aaactcactg gctgaaggag gaaatttttag aaggaagcta ctaaaagatc taatttgaaa 60
aactacaaaa gcattaacta aaaaagttta tttycctttt gtctgggcag tagtgaaaat 120
aactactcac aacattcact atgtttgcaa ggaattaaca caaataaaag atgccttttt 180
acttaaacac caagacagaa aacttgccca atactgagaa gcaacttgca ttagagaggg 240
aactgttaaa tgttttcaac ccagttcatc tgggtggatgt ttttgaggt tactctgaga 300
attttgctta tgaaaaatca ttatttttag tgtagtccac aataatgtat tgaacatact 360
tctaatacaa ggtgctatgt ccttggtgat ggtactaaat gtgtcctgtg taccttttgc 420
acaactgaga atcctgcagc ttgggtttta tgagtggggt catggaataa ttatgggggn 480
atgtaaaaaa aanaaaagag ggg 503
```

<210> 202

<211> 438  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (344)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (391)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (412)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (425)  
<223> n equals a,t,g, or c

<400> 202  
catgtgatca tttatgtgta tacagagtaa ttataaaatg tttgctgtgt acaaaaactat 60  
tttattagt gatttttaa acattaaatg ggtatatata gtatatatga tctaggagta 120  
tatataggga actctaacaa atttataata tttatttttt aaaagaatga ccaaacatgg 180  
caaaatatta ctatgagtta gatctggaca gtggatgcaa gggcttcat tatgttattg 240  
tctgattttg tgttgaactt atttcacaat gcagaggaaa aaatagtctt ggctcatcct 300  
tagatatcac tgttcataga gccagtcacc aggacgatcc cacnttttat ggtggggccag 360  
gcattgggag tccagagccc atcacccaac naccaagtga cgggtgggga cnctggtgag 420  
cctgnaaagg gggccatc 438

<210> 203  
<211> 876  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (778)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (786)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

<222> (804)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (835)

<223> n equals a,t,g, or c

<400> 203

```
cggcgatata tactaaattc gcgcgtgact tcatgagtag tagtgaatac aatcttcctg 60
cttctaagct tgtgtctact agaatgtctt cccctaaaa gatataattg aatgtttccc 120
atgtttcttc tagtacttta atgcgtttca ttttcataty gaaatcattg atctacttct 180
agtttykgat acaamatgtg agccaggaaa cccagttttt aaattttcaa tagctgtcca 240
ggtgtcccctg cacctcttat gcatgagccc tcgctttgtg ccaatgtgga gtgcccgcct 300
gtcacacagt gcccatgtgg agtgcccgcg tgcctcatgtg cccatgtgga gtgcccgcct 360
gtcacacat gycgatgcgg agtgcccrcc tgctcacaca tgcccatgtg gagggtcccgc 420
ctgctcacac gtgcccattg ggagtgtccc cctgtctaca cacgtgtcca tgtggagtgc 480
ccacctgtct atgtgtccat gtggagtgtcc cacctgtctc catgtgtcca tgtggagtgc 540
crrctgtctc cacacgtgtc catgtgtgag gcccgcctgc tcacrygtgc cgatgcggag 600
tgcccgcctg ctcacacgtg ccgatgcgga gtgcccgcct gctcacacgt gccgatgcgg 660
agtgtcccgc tgctcacacg tgcccatgcy gagggtcccgc ctgctcacac gtgcccgcgc 720
ggagtgtccc cctgtctaca cgtgtccgacg cggagtgtccc gctgtctcac acgtgtccnac 780
gcggantgtc cgcctgtctc cacntgtcca cgcggantgc ccgcctgtct acacntgtccc 840
atgtggagtg ccgcctgtct acgtgtccga tgtgga 876
```

<210> 204

<211> 1504

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1468)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1494)

<223> n equals a,t,g, or c

<400> 204

```
tgtnytccmt gtgcnacaac cygcygcaga ctggggcccy tctcagttaa ttgggtttca 60
caagcaataa tttctccaca acaaaaacca caacttgaag tgagttgaaa agagatcaat 120
agtggaaaca gtcgcctcag tactttttct ttctggattt catctctaga aatttgaagt 180
gtttgagaca gagtccaccc tttgtgcaag gcgagaacca atgaatggac tccttggtgtg 240
aattattgca tcttcttcca aagcagggtt atcaagactt tcacagagat tcatttttgt 300
tgagaagtaa gggttaatag gaggatagaa tttggatcca aatctagtga taaaagtgtc 360
caagcaatca aaaagtaaga tatttttaggg acataccaac atcttccctt tctgctaatt 420
tcatgtcca aagatatrgc aaaaaaaaa atcataaaaa gtgcttttgc cctacttgtg 480
ttctagtttt cccatggcag aattttgtaa ttacatccag aatatagtgt atattttgtt 540
cctcaaactt tattacattg gatggatatt gttgractgg ggcactgggtg cctatatcca 600
aggctctttc ctatcaacgt gtctgtccac gatttgttgt gtttaaagct tcattttgaa 660
aaatcactgt cccctgtgg gtagtactgt tattgttttg ttcatgtcta tgtgggacac 720
attgcatcac atggcaaacc aactctctgt ggatgtgaga taagtactta taaaaccagc 780
ttgaaaacat cgtcttatgt attatgtcat cctgcatcat aatgcaatta tgtgtatcat 840
aacatgctca tttaaaaaaa gagaaaccag caaattcatg tttgtccata gaagaatgta 900
ctcagaactt tgtgtgtgga aacgatgaga acagaccacc ttaagatac ccacctgcca 960
cttaaaatga cttagtata attagtagta gtctagacgt tggtcttggt gtgtgggggt 1020
caattctaac gtcatgttct tttgaataaa tctctcagtc atatttgaaa aaaaaatata 1080
tggaataaaa gaaaaatata atctttggcc aaatcaagca ggcactcttt ttcttttcct 1140
tgacgtttag ctcattatac gtggtgattg gatcacgaga tctgtccgtg tgaaaatata 1200
gaaacatcct ttagtttaca aaacagttat tctaggcttg aagcctctgg aacagcaaatt 1260
tgaatagatg ggctgcatct gatttgcttt atggatgtaa ttttataaaa cactcttggt 1320
tctctgaccc cagggagtta agagtgccca gagggaggtcc tacacattaa aggataaagc 1380
ccccagtgta tgctggcagc aaatgtgttg agttcttaaa tcttccattt ggktttctgk 1440
ttcagggttt taattgcaat ggattttntt tccccggtt tttcttaagg gccncatttt 1500
ccca 1504
```

<210> 205

<211> 525

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (47)

<223> n equals a,t,g, or c

<400> 205

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tgaaggcctc ctttgtagca ttttccattt ctctaactca catgtgtagt ctcagcactg 420
cagaggacag atttgtttgt gccctctgag actggttggg tgggtgggtg gttagttttg 480
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ttttatgaat cctaaaattt gtcttggsct gttaaaaaaa aaatt

525

&lt;210&gt; 206

&lt;211&gt; 2494

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (2471)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (2485)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 206

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cccaaccgaa tctacttcca aagcagaaga aaatgaaaaa gttgattcaa aagtgaagc 120  
tttcaagaaa ccattgagtg tatttaaagg ccccttacta cacatcagcc cagcagaaga 180  
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gatggaacat aggttaagat gccatactgt tgaaagcagt aaaccaaaca ctcttacggt 540  
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<210> 207

<211> 880

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (864)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (865)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (868)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (878)

<223> n equals a,t,g, or c

<400> 207

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ccatcttacc tccagataag gtgttttagg tactctgttg ccagtgttag tgcaacttag 180  
tttaaaaata gaggacttgt tcacagtatg ctctaagtct cacactggag ttttgtgcaa 240  
cataaagtag gtgatttttg agcagagcga agtctagaaa ttgaccttaa attattttgtg 300  
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cattgaacgt tagattgttc taagaccaga attagattaa aaatgcataa catattaagt 420  
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gttttaattg atgcttaatc tgttaaaatg atgtactgta ttttaaagta ttctaattgt 540  
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caataaaacc atcgtggatg ctttacatag catcagcggg aactgagttt aagtcactg 780  
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aaaaaaaaaa agccgaggkg ggcnnngtncc aaggggcntg 880

<210> 208  
<211> 640  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (2)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (5)  
<223> n equals a,t,g, or c

<400> 208  
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gaggtcttcc aggagatgct gtccatgctg ggagatcaga gcaacagcta caacaatgaa 180  
gaattccctg atctaactat gtttcccccc ttttcagaat agaactattg ggggtgaggat 240  
aaggggtggg ggagaaaaaa tcaactgtttg tttttaaaaa gcaaatcttt ctgtaaacag 300  
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tccaaggctt ttaggactgt ctgaaaattt gaggtgggt gaagttaaaa cacctttcct 480  
tatgtctcct gacctgaaat tgtatagtgt tgatttgtgc tgagatcaag aggcagggtta 540  
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<210> 209  
<211> 303  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (85)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (92)  
<223> n equals a,t,g, or c

<400> 209  
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tgaggaaagt gaggtcaca gaagttaatt ggcccagggt cccacaacta gtcagtgcag 180  
aggtgggggra acataaccag atttgttcgg catgkaactt gtgccaaatt tcctccaaag 240  
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act 303



<210> 210  
<211> 1168  
<212> DNA  
<213> Homo sapiens

<400> 210  
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cactctgaaa tccagtcagt gtgcctcact agacttttcg atttcaagat tttctgcaga 120  
aaatgttttg aaaactttga atacttaaaa atggcagggtg tagtattgca ctttgctagt 180  
tgctcagata ccctttttta tttgtataga tattctgagt tccttttttt ttctacatgt 240  
tgtacgttgt cgaaagctaa aaggaaactt atccttggat cacggaaggc agaggcattt 300  
ggtgagatgg aaacaaggat gtgtaaaaat gagacgacca cctctcggat taaaaaaaaa 360  
aagtgccaga gttctagggt tctaagtgat gtccaggaag gaggaggaat aatatttatg 420  
gagcatatat tatggaacac agcaatcagg atgagtgaag aattgatttg cagctgacct 480  
gcaaattgaa tcatcaggaa catccctttc tcatggagtc ccttaattta caagttaact 540  
gcaaacatag gagatgatag ttccaagaag gaacatttta tcgtctttgt ttttaatctc 600  
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gttccctcag caatatgatt gtgatgactg aaaaagggaa actgtgccac tatttgtacc 720  
atcattttca ccaaaatcta aaaatgcttt ttatgacgta tggagacatt cttcatgttt 780  
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<210> 211  
<211> 3133  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (3069)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (3085)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (3114)  
<223> n equals a,t,g, or c

<400> 211  
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cagagtgggt gagagatggc atccttacct ggaaccttat gggttgggtt actgctgaa 300  
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ttcaccagcc acc 3133

<210> 212  
<211> 680  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (613)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (660)  
<223> n equals a,t,g, or c

<400> 212  
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ttttgtgttt ggaacacctg gttccatgaa aagtatgctt tgtgttttaa ctgttaaaat 180  
aatttaaaaa ttaattattt tacataatta aagaagttaa aaactattaa cattaaataa 240  
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tttgctcctt tatacagrat tattaactat attttactaa ctaaaaaact ctagtattct 360  
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ggatccaggg gcttcaccgg 680

<210> 213  
<211> 563  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (440)  
<223> n equals a,t,g, or c

<400> 213  
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taccgtaag acaaaaactg ttaaagcctc ctgagtctaa cctagattac atcaggccct 180  
ttttcacaca caaaaaaatc ctttatggga tttaatggaa tctgttggtt cccctaaagt 240  
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cctagggttc agacttttgc ttaaggccmg taatytyaga aaaaaatttc caaatacatg 360  
gacagagcgg aaaacataaa gaagtacttg gaccaagaaa aaagaagatg gaaaatatca 420  
caagcaaatt aaaatagaan aaaatgcaac aggtttcagt tatgaatcac ttttccgga 480  
attaccttaa tgaaacagtt accgaagttt tgggatagaa aaatccttta ttttaaaact 540  
tactcctcca gcttggtata act 563

<210> 214  
<211> 2636  
<212> DNA  
<213> Homo sapiens

<400> 214  
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ccagaaaact ggataataag gatctatttg gaaagtcaga cccataacctg gaattccaca 180  
agcagacatc tgatggaaac tggctaattgg ttcatcggac agaggttggtt aaaaacaact 240  
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tkgaatgcat aaatgagaaa aaaaggcaaa agaaaaaaaag ctacaagaat tcagggtgtta 480  
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<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1816)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1821)  
<223> n equals a,t,g, or c

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 216

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<210> 217

<211> 1529

<212> DNA

<213> Homo sapiens

<220>

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (458)

<223> n equals a,t,g, or c

<400> 217

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<210> 218

<211> 1100  
<212> DNA  
<213> Homo sapiens

<400> 218

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<210> 219  
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<212> DNA  
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<220>

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<222> (475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (476)

<223> n equals a,t,g, or c

<400> 219

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&lt;210&gt; 220

&lt;211&gt; 1310

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 220

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&lt;210&gt; 221

<211> 1369  
<212> DNA  
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<220>  
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<400> 221  
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tctggtagca tgtcattgat gggacatgaa gacatctttg gaaatgatga gattatttcc 1320  
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<210> 222  
<211> 792  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (573)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (585)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

<222> (599)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (636)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (699)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<400> 222

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tgcccgggac cttctcgctt tcattctagcg ctgcactcaa tggaggggcg ggcaccgcag 120
tgcttaatgc tgtcttaact agtgtaggaa aacggctcaa cccaccgctg ccgaaatgaa 180
gtataagaat cttatggcaa gggccttata tgacaatgtc ccagagtgtg ccgaggaact 240
ggcctttcgc aaggagagaca tcctgaccgt catagagcag aacacagggg gactggaagg 300
atgggtggctg tgctcattac acggtcggca aggcattgtc ccaggcaacc ggggtgaagct 360
tctgattggt cccatgcagg agactgcctc cagtcacgag cagcctgcct ctggactgat 420
gcagcagacc tttggccaac agaagctcta tcaagtgcc aacccccacag gcttgcttcc 480
cccagagacac ccattcttac ccaagggtgcc caccctttcc cttacccaaa aaatcaaggg 540
ggaaattttt acccaaagggt tcccccaact ttngggccaa cgggnaaccc ccaaaggana 600
caaaggaggg gtattattca gggttgcccc acccanttaa ggttgcaagg aggaaaggca 660
ttttgggggg ggaaccaggg tttggggccc ccaacgttng ggtataaaaa aggggtgttt 720
ccaggaggag gattgggcaa agttgttcct attttctttg gttaggagcc tntttaacaa 780
aaccagctt gt 792
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<210> 223

<211> 921

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (851)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (885)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (895)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (911)

<223> n equals a,t,g, or c

<400> 223

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gccccctctg cagtaccccc gccctcttc tcccaccaca atgagatcct aagatggcgg 60
tggtctgcggc ggttggcgct gcgtactgag gtcgaaaagg cggccactgg ggccgaggca 120
gccaggaaac gtgtgggcct ctctgctgcg gtctccgagg gccgaccgct gccggcgggc 180
ggtcgtgggg gctgactgtc gctctgcctt tgacaggaga ggctgcttct tgtagaggaa 240
acagctttga agtgtggagc gggaaaggag cagtttctga gctgcaaaaa ctagtctcta 300
aacagagagt taattgttaa atccagtatg gccacaggag gaggtccctt tgaagatggc 360
atgaatgatc aggatttacc aaactggagt aatgagaatg ttgatgacag gctcaacaat 420
atggattggg gtgccaaca gaagaaagca aatagatcat cagaaaagaa taagaaaaag 480
tttggtgtag aaagtataaa aagagtaacc aatgatattt ctccggagtc gtcaccagga 540
gttggaaggc gaagaacaaa gactccacat acgttccac acagtagata catgagtcag 600
atgtctgtcc cagagcaggc agaattagag aaactgaaac agcggataaa cttcagtgat 660
ttagatcaga gaagcattgg aagtattcc caaggtagag caacagctgc taacaacaaa 720
cgtcagctta gtgaaaaccg aaagcccttc aactttttgc ctatgcagat taatactaac 780
aaggagcaaaa ggtgcatttt acaagtcccc caaacagagg aaacggttgg gttcagcaca 840
gtgttaaaagg nttgttttgc tttctggttt ttaagtaatt gaccnctttg gccanacttt 900
tccgggtgtt ntgaaggagg t 921
```

<210> 224

<211> 1979

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1949)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1953)

<223> n equals a,t,g, or c

<400> 224

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ggcgccgccc aagcgccaga cgcgagctgg gaaaagggag gcagaggagg cggaggcaga 60
ggcagaggca gagcccggtg ccgagacca ggcagagacc ggccggggtg ggcctcgcaa 120
agccgggctcg gcgagctctc ccgacacccg agccggggag gaaaagcagc gactcctcgc 180
tcgcatcccc gggagccgca ctccagactg gcccggtagt cagggggtca ggagcagatc 240
ccgaggcagg ctttgctcag cctccgacga gggctggccc tttggaaggc gccttcaaca 300
gccggaccag acaggccacc atgaccgaga attccacgtc cgcccctgcg gccaaagcca 360
agcggggcaa ggcctccaag aagtccacag accaccccaa gtattcagac atgatcgtgg 420
ctgccatcca ggccgagaag aaccgcgctg gctcctcgcg ccagtcatt cagaagtata 480
tcaagagcca ctacaagggtg ggtgagaacg ctgactcgca gatcaagttg tccatcaagc 540
```

gcctgggtcac caccgggtgtc ctcaagcaga ccaaaggggt gggggcctcg gggtccttcc 600  
ggctagccaa gagcgacgaa cccaagaagt cagtggcctt caagaagacc aagaaggaaa 660  
tcaagaaggt agccacgcca aagaaggcat ccaagcccaa gaaggctgcc tccaaagccc 720  
caaccaagaa acccaaagcc accccgggtca agaaggccaa gaagaagctg gctgccacgc 780  
ccaagaaagc caaaaaaccc aagactgtca aagccaagcc ggtcaaggca tccaagccca 840  
aaaaggccaa accagtga aa cccaaagcaa agtccagtgc caagagggcc ggcaagaaga 900  
agtgacaatg aagtcttttc ttgcggtcac tccctcctgt ctcctatattt ctgtaaataa 960  
ttttctcctt ttttctctct tgatgtctac caccaccttt tgcccccttc tgttctgact 1020  
ttataagaga caggatttgg attcttcaga aattacagaa taattcattt ttccttaacc 1080  
agttgtgcaa ggacagcaac aaccaatcta atgatgagaa tgtacttata ttttgttttg 1140  
ctattaacct acttacgggg ttagggattt gcgggggggc ttgtgtgttt tgttggttg 1200  
tttgccatga aggtagatgt ggggtggggag aagacacaag gcagtttggt ctggctagat 1260  
gagagggaac ccaggaattg tgaggtttagc aggaatatct ttagggtgag tgagttttcc 1320  
ttgagttggg caccggttgt gagagtttca gaacctttgg ccagcaggag agaggtggta 1380  
gggagcagcc agccggcaaa ggaaggaggt ggaaaaaac cgccaccggg ctgacttcca 1440  
cctcccagtg gtgagcagtg ggggcccaa cccagtttcc ttctcatttt tgttagtttg 1500  
ccctttcggc ctccctatatt tcttagggaa ggggagtggt gtccaagtga cagctggatg 1560  
ggagaagcca tagtttctcc cagtgcagct aggatgtagc cattggggga tctttgtggc 1620  
ttcagcaaat tctcttggtt aaccggagtg aaaacttcag gggaagggtg gggagtcagc 1680  
caagtgcctc agtgtgccct gttgaaactt aggtttttcc acgcaatcga tggattgtgt 1740  
cctaggaaga cttttctttt cctctggatt tttgttcttc ctgtacaaga ggtgtctttg 1800  
cttggttttg tggggctgcg gccacttaaa acctcccgat ctctttttga gtcctttttt 1860  
taaacagtg ttacttgtgc cgggaaaatt ttgctgtctt tgtaatttta aaactttaaa 1920  
ataaattgga aaagggaraa aaaaaaagna aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1979

<210> 225

<211> 541

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (506)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (511)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (532)

<223> n equals a,t,g, or c

<400> 225

tgcaccacg cgtccgcccc cgcgtccggg aaacaggaga tcgtggatcc tccttcaaaa 60  
atggaggatg gaaagcccggt ttgggcgcca caccctacag atggatttca gatgggcaat 120  
attgtggata ttggccccga cagcttaaca attgaaccct tgaatcagaa aggcaagaca 180  
tttttggtc tcataaacca agtgtttcct gcagaagagg acagtaaaaa agatgtggaa 240  
gataactgtt cactaatgta tttaaatgaa gccacactgc tccataatat caaagttcga 300

tatagtaaag acagaattta tacatatgtc gccaacattc tgwttgcagt gaatccatac 360  
tttgacatac ctaaaatata tcttcagagc ataaagtcac atcaaggaaa atctcttggg 420  
acaagaccac ctccaggtct ttgcaattgc tgataagcct ttcgggacct ggaagggtgcc 480  
ccaagatgag tcagtctaac catggnatcc nggagaatcc aggggccggg gnaaaccagg 540  
a 541

<210> 226  
<211> 277  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (135)  
<223> n equals a,t,g, or c

<400> 226  
tcgacccacg cgtccgtgaa taagcaatct ggcctttgag ggggctgttg cggtacagac 60  
aattctgttg agcggcttcg gcggctccga ggagaagcaa tatgttaagg atacctctaa 120  
gaagggcctt agtangcctt tctaataagt cttccaaagg atgtgttcga acaactgcca 180  
cagcagcaag caacttratt gaagtatttg ttgatgggtca rtctgtcatg gtggaaccrg 240  
gaackacygt cctccaagct tgtgagaagg ttggcat 277

<210> 227  
<211> 2069  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (2026)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (2042)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (2050)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (2061)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (2062)

<223> n equals a,t,g, or c

<400> 227

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aagcagcgga atacaagaga ctgaactgta tctgcctcta tttccaaaag actcacgttc 120
aactttcgct cacacaaagc cgggaaaatt ttattagtcc tttttttaa aaaagttaat 180
ataaaattat agcaaaaaaa aaaaggaacc tgaactttag taacacagct ggaacaatcc 240
gcagcggcgg cggcagcggc gggagaagag gtttaattta gttgattttc tgtggttgtt 300
ggttgttcgc tagtctcacg gtgatggaag ctgcacattt tttcgaagg accgagaagc 360
tgctggagggt ttggttctcc cggcagcagc ccgacgcaa ccaaggatct ggggatcttc 420
gcactatccc aagatctgag tgggacatac ttttgaagga tgtgcaatgt tcaatcataa 480
gtgtgacaaa aactgacaag caggaagctt atgtactcag tgagagtagc atgtttgtct 540
ccaagagacg tttcattttg aagacatgtg gtaccaccct cttgctgaaa gcactgggtc 600
ccctgttgaa gcttgctagg gattacagtg ggtttgactc aattcaaagc ttcttttatt 660
ctcgaagaa tttcatgaag ccttctcacc aagggtaccc acaccggaat ttccaggaag 720
aaatagagtt tcttaatgca attttccaa atggagcagc atattgtatg ggacgtatga 780
attctgactg ttggtactta tatactctgg atttcccaga ggtcgggta atcagtcagc 840
cagatcaaac cttggaaatt ctgatgagtg agcttgaccc agcagttatg gaccagttct 900
acatgaaaga tgggtgttact gcaaaggatg tcactcgtga gagtgggaatt cgtgacctga 960
taccaggttc tgtcattgat gccacaatgt tcaatccttg tgggtattcg atgaatggaa 1020
tgaaatcgga tggaaacttat tggactattc acatcactcc agaaccagaa ttttcttatg 1080
ttagctttga aacaaactta agtcagacct cctatgatga cctgatcagg aaagtgttag 1140
aagtcttcaa gccaggaaaa tttgtgacca ccttgtttgt taatcagagt tctaaatgtc 1200
gcacagtgtc tgcttcgccc cagaagattg aagggtttta gcgtcttgat tgccagagtg 1260
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aggagttaga tatcttgcat gaatgctctc ttctgtgttt aggtattctc tgccactctt 1560
gctgtgaaat tgaagtgcag gtagaaaaaa ctttttacta tatgaaactt tacaacactt 1620
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ttctttacta atgtttattga aaccaatttc tacttcatac tgatgttttt ggaaacagca 1860
attaaagttt ttcttccatg agttgagtc ttaagaaaat gattccagtt actcattttg 1920
catatttgct attttaacat tattggaccc tgcatttata gtcctttgat ttcttccctc 1980
tccctggtgt ctcccccaag accccaaata aagcaataca ctgttnaaca aaaaaaaaaa 2040
anggggggcn gccctagggg nnccaagct 2069
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<210> 228

<211> 471

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (287)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (372)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (418)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (462)

<223> n equals a,t,g, or c

<400> 228

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taatgtagga actggtgaga agaaggtgac tgaagcctgg atttctgagg atgaaaactc 120
acataggacg acgtcagaca gactcacggt gatggagctc ccctctcccg agtctgagga 180
agtccacgag cccagattag gggagctctt gggaaatcca gaaggtcaga gcctggggag 240
ttccccctct caggacaggg gctgcaacag gtgacagtga cccattngaa gatccagaca 300
ggagagacag ctcaagtgtg caccaagtca ggaagaaacc atattctgaa atcagacttc 360
ttctggcttc anagagagct ccttagaagg ggaagccat tccttgcgat atcctgtngg 420
gaaaccttca cgtttaattc ggacctaaat aaggcatcgg antttcgcat c 471
```

<210> 229

<211> 1640

<212> DNA

<213> Homo sapiens

<400> 229

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cttctcttac ctcccgggtc tgtmaccgct ggaagaggct ggtggacgac cgggtggctgt 120
ggcgacatgt cgacctgacg ctctacacga tggcgacctt aagtcattgt gcacctcctt 180
cgaagggtaca tggcatcccg gctccattcc ctgcggatgg gtggctacct gttctctggc 240
tcccaggccc cccagttgtc ccctgctctg ttgagagccc tgggccagaa gtgccccaac 300
ctgaagcgcc tctgcctgca cgtggccgac ctgagcatgg tgcccatcac cagcctgccc 360
agcaccttga ggaccctgga gctgcacagc tgcgagatct ccatggcctg gctccacaag 420
cagcaggacc ccaccgtgct gcccctgctt gaatgcatcg tgctggaccg cgtccccgcc 480
ttccgtgacg agcacctgca gggcctgacg cgcttccggg cettgcgctc gctgggtgctg 540
ggtggtacct accgtgtgac cgagacaggg ctggatgctg gcctgcagga gctcagctat 600
ctgcagaggg ttgaggtgct gggctgcacc ctgtctgccg acagcaccct gctggccatc 660
agccgccacc ttccgagatg tgcgcaagat ccggctgacc gtgaggcct ctctgcccct 720
ggcctggctg tgctggaggg aatgccggcc ctggagagtc tgtgcctgca ggggtccctc 780
gtcaccccag aaatgccctc cccactgaa atcctctcct cctgcctcac tatgcccag 840
ctcagagtcc ttgagctgca ggggtggggg tgggagggtc aggaggcgga gaagatcctg 900
tgtaaggggc tgccccactg tatggctatc gtcagggtct gccccaaaga gtctatggac 960
tggtggatgt aactactcca cctgcccttg ggacccatcc cagttttcat cattgagccc 1020
cagaccctct gagcagcacc ttgaagaggg cagataatca gacttgagga aactgaaagc 1080
cccaggttga gagaacagag gcctagggac ctccagacca ttggaatcac tgtttgccag 1140
ctgtgtggcc ttggctatat catcagctc tgggaagcct agttcccaca tctggaaata 1200
aggatgatca tagctacctc acggttacat tgcaaagcct tactctaaaa gctcccagcc 1260
tccagaggct ctcaatgaag agtcaccttc atggctcgtc tcaggaacag gacggatgaa 1320
```



```

gaaggggtgg ggttaagact caggggcacc tgaggggtctg agccccctta tgagtaccca 1380
agaaggactg tctatgcatg cacacccaca agcctataca ccatttatat acctacacgc 1440
acgcaagaga cgcggagaga taggcgatgc agactcgcga ttcaatgata gatatgctca 1500
taaaagtgtc caattatatt ttctgtattt tgtatgctgt attttccaag acgtatatta 1560
ttttactatt aaagaaaaaa atcatttttt tttcccgaaa aaaaaaaaaa aaaaaaaaaa 1620
aaaaaaaaaa aaaaaaaaaa                                     1640

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<210> 230  
 <211> 1970  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (2)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (4)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (1952)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (1963)  
 <223> n equals a,t,g, or c

<400> 230

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cngnccccgag cccagagcgc cggcggccccg actcccggcc gcccctttct ttctcctcgc 60
cggccccgaga gcaggaaacac gataacgaag gagggccaac ttcattcaat aaggagcctg 120
acggatttat cccagacggt agaacaaaag gaagaatatt gatggatttt aaaccagagt 180
ttttaaagag cttgagaata cggggaaatt aatttgttct cctacacaca tagatagggt 240
aaggttgttt ctgatgcagc tgagaaaaat gcagaccgtc aaaaaggagc aggcgtctct 300
tgatgccagt agcaatgtgg acaagatgat ggtccttaat tctgctttaa cggaagtgtc 360
agaagactcc acaacagggtg aggagctgct tctcagtga ggaagtgtgg ggaagaacaa 420
atcttctgca tgtcggagga aacgggaatt cattcctgat gaaaagaaag atgctatgta 480
ttgggaaaaa aggcggaaaa ataatgaagc tgccaaaaga tctcgtgaga agcgtcgact 540
gaatgacctg gttttagaga acaactaat tgcactggga gaagaaaacg ccactttaa 600
agctgagctg ctttactaa aattaaagt ttggttaatt agctccacag catatgctca 660
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atccaatgtg agttcatttg tggacgagca cgaaccctcg atggtgtcaa gtagttgtat 780
ttctgtcatt aaacactctc cacaagctc gctgtccgat gtttcagaag tgcctcagt 840
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gattatcaag caagagccga tgggaattaga gagctacaca agggagccaa gagatgaccg 960
aggctcttac acagcgtcca tctatcaaaa ctatatgggg aattctttct ctgggtactc 1020
acactctccc ccactactgc aagtcaaccg atcctccagc aactccccga gaacgtcggg 1080

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aactgatgat ggtgtggttag gaaagtcatac tgatggagaa gacgagcaac aggtcccca 1140  
gggccccatc cattctccag ttgaactcaa gcatgtgcat gcaactgtgg ttaaagtcc 1200  
agaagtgaat tcctctgsct tgscacacaa gctccggrtc aaagccaaag ccatgsagat 1260  
caaagtagaa gcctttgata atgaatttga ggccacgcaa aaactttcct cacctattga 1320  
catgacatct aaaagacatt tcgaactcga aaagcatagt gcccgaagta tggtagattc 1380  
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gcaactggcat caaaaagaac tgagtggcaa aactcagaat agtttcaaaa ctggagtgt 1500  
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gatagcaaac ttatctgcag aggttgtctc actcaagaga cttatagcca cacaaccaat 1620  
ctctgcttca gactctgggt aaattactac tgagtaagag ctgggcattt agaaagatgt 1680  
catttgcaat agagcagtcc attttgtatt atgctgaatt ttcactggac ctgtgatgtc 1740  
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aagattagat tgtgttatca ctctgcctgt gtatagtcag atagtccatg cgaaggctgt 1860  
atatattgaa cattattttt gttgttctat tataaagtgt gtaagttacc agtttcaata 1920  
aaggattggt gacaaacaca gaactcctgc tncattgcat tgnnttgatg 1970

<210> 231  
<211> 310  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (262)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (298)  
<223> n equals a,t,g, or c

<400> 231  
gcgagactcc gtctcaaaac aaaacaaata aaaaaaacaac acagtatttt ttaggaattc 60  
attttatttt aaattttgta aggaggagtt acaaaaagac aaatactaca tatgattcca 120  
cttgtcatat ctagagtcaa attcatggag acagaaagta gaaagggtgt taccagcggc 180  
tggaaggag agaagtgtga gtttaatggg tatagaattt tagttttgta aggtgaaatg 240  
agttctggag attggttgca cnaacagtgt gaataactc aacactactg aactgtanac 300  
ttaaatgat 310

<210> 232  
<211> 2833  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1399)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

&lt;222&gt; (2828)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 232

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aaaaaaaaanaa aaa

2833

&lt;210&gt; 233

&lt;211&gt; 692

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (289)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 233

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cttgaggaaa accagcggaa cctccttcag atgactgaaa agttcttcca tgccatcatc 600
agttcctcct cagaattccc ccctcaactt cgaagtgtgt gccactgttt ataccaggca 660
acttaccact ccctactgaa taaagctaca gt                                     692
```

&lt;210&gt; 234

&lt;211&gt; 1353

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (649)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1020)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1255)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 234

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aagatggcgg actcgggtggc tagccgatga ggaggccgcg gggggaaccc ggcccccg 120
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ccaactccat gcttcgagtc ctgctctctg ctcagacctc ccctgctcgg ctgtctggcc 240
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```
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accactactc ggtggcgctt cgctcgtctgg gccagctctt ggggtctcgg ccacggcccc 480
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aggcagcaag ttgccatttt cccagcttcc atc 1353
```

<210> 235

<211> 346

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (151)

<223> n equals a,t,g, or c

<400> 235

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ggctgttttg gagacttatg gtcaccctga agtactgcct gcctctagtg tcgcgtccct 120
ccagtatccg atgggagcgc cgtccgcagg naatgtgtct ctctgatcat ggtgcctcgt 180
gtccagctct ggggaagacc gagacgaaat cgagtcagct ggcgttggga gagggcttat 240
ttcgcgttcc gcttgccac tttcaggaaat ttgattctga gagcagggtc gcggttccag 300
gcagggtttg tacacatatt tgcgttgga ggaaaaaaag aaccta 346
```

<210> 236

<211> 2271

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (547)

<223> n equals a,t,g, or c

<400> 236

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acagtgatgg aaagactcac ctggacaaac cctactgtgc cccccagaaa gaatgcttcg 120
```

```
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tgatcacatt aaacatgatt aaaagcgccc ctgtgggtcc tgtggctgga gggatcatgg 240
gatgcatcat ggtcttggtc ctggcggtgt atgcctaccg ccaccagatt catcgccgga 300
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gttttaaatga taggggtatta tgatacaatg taaaaaacaa ttggttcttc agcagtacag 2160
aaagtaaaact atatatgtgc tatcaggaaa cccttcata ctgtgtataa aattgcaatc 2220
tagtgaaata aactgtatgc aatggaaaaa aaaaaaaaaa aaaaaactcg a 2271
```

<210> 237

<211> 3050

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (492)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3024)

<223> n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (3031)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 237

```
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aggrgtatct ttgatgaaag acatttagga ccctagaaac taaatcttgt caccaagact 120
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<210> 238

<211> 2802

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (613)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1800)

<223> n equals a,t,g, or c

<400> 238

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<210> 239

<211> 1537

<212> DNA

<213> Homo sapiens

<400> 239

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cgtcgccgtt tctcctttct tgggcagtat tttcccagc gccacgcgga ggctgggcca 180  
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aagagaacac acagtggaga gaaacctat acatgccatg cctgtgggaa ggcctttaat 1440

acttcctcca cactttgtcm acatwataga attcatactg gtgaaaaacc ctttcagtg 1500  
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<210> 240

<211> 1334

<212> DNA

<213> Homo sapiens

<400> 240

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aagaagatcg agaagcggaa cctcaaattg cggcasggaa cctaaagttt cagggggcct 180  
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<210> 241

<211> 2438

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (71)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (879)

<223> n equals a,t,g, or c

<400> 241

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cctgaaactg ncaccttcca accttcaagg cttttgaaga acaaagcttt attatgcaa 120

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cccatcacac agactaaagc cacctcttgc aaaccacata cccaaaacaa agaatgccag 180
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<210> 242

<211> 139

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (137)

<223> n equals a,t,g, or c

<400> 242

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tagggactag ggatcgncg 139

<210> 243  
<211> 479  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (462)  
<223> n equals a,t,g, or c

<400> 243  
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agtcacaaaa gattttgcat gtcaagattc tagccttttt cttctggtgt actgagaggc 120  
cagaggagcc cattctaggg actaagtatt gacagaattt gggtctgttg caagaattac 180  
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aaacagaaag attggaatag gattgraatg gagtctcccc gtgattttta aaaacactta 300  
statggggcc asgcgcrcckg tggctcaacg cctgtaatcc cagcactttg ggaggccaag 360  
atgggtggat catgaggtca ggagatcgag accgtccttg ctaacatggt gaaaccccg 420  
ctctactaaa aatataaaaa aattaacccg gccgtggttg cngggcgcct gtagtccca 479

<210> 244  
<211> 584  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (582)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (583)  
<223> n equals a,t,g, or c

<400> 244  
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tgccccaccgc catctccagc tggtgccaaag acagagattg ctttaagtgg caaatcacct 120  
ttatttagcag ctacttttgc ttactgggac aatattcttg gtcctagagt aaggcacatt 180  
tgggctccaa agacagaaca ggtacttctc agtgatggag aaataacttt tcttgccaac 240  
cacactctaa atggagaaat ctttcgaaat gcagagagtg gtgctataga tgtaaagttt 300  
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ggggatcgca gcacatatgg actatcaatt atacttcac agacagaact tagtttctac 420  
ctcccacttc atagagtgtg tgttgataga ttaacacata taatccggaa aggaagaata 480  
tggatgcata aggaaagacm agaaatgtcc agaagattat cttagaaggc acagagagaa 540  
tggaagatca ggtcagagta ttattccaat gcttactgga gnng 584

<210> 245  
<211> 332  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (235)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (272)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (288)  
<223> n equals a,t,g, or c

<400> 245  
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ccccagggtg tgcgcttgcc agggccacat cttgagcctt cgctctgctc cttcgagagc 120  
cgctgctgcc ccaccccaat cccaaccag ccacccctc ctgcctccct gccatctgtc 180  
cctttcatcc tccctggcgt gccaaagcgc tgccatggca ccgcctgtta cctanccag 240  
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aactcagccc tgccactccc tgctctgaag ct 332

<210> 246  
<211> 1617  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (215)  
<223> n equals a,t,g, or c

<400> 246  
cccagatcc ctttcccaga gtgctctgcy ccgwaagaa gcggctcccg gggactkggg 60  
gcattttgtg ttggctggag ctggagtaac aagatggcgt cgtccgcgga gtgacagggg 120  
tccctctggg ccggagccgg cggcagtggt ggcagcggta tcgccgccct agctcaccgc 180  
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aacggcgagg aagtggcagt gaagctagaa tctcagaagg ccaggcatcc ccagttgctg 660  
tacgagagca agctctataa gattcttcaa ggtgggggtg gcatcccca catacgggtg 720

tatggtcagg aaaaagacta caatgtacta gtcatggatc ttctgggacc tagcctcgaa 780  
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rccaagaacc aagtgcgtt acagggaata aattgaatmc aaaattgggt aattcatttc 1560  
taacagkgtt agatcaagga ggkggtttta aaatacataa aaatttggtt ctgcgtt 1617

<210> 247

<211> 1449

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1447)

<223> n equals a,t,g, or c

<400> 247

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gagaacgcga gtcccaggat ccccgccacc casttctctt ccactgcatt ccccgggcgc 120  
gtgtgggacc gaggtggaca tggatccgca gaggtcccc ctattggaag taaaggggaa 180  
catagaactg aagagacctc tgattaaggc cccttcccag ctgcctctct caggaagcag 240  
actcaagagg aggcctgacc agatggaaga tggcctggag cctgagaaga aacggacaag 300  
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1449

&lt;210&gt; 248

&lt;211&gt; 1484

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (37)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1477)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1478)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 248

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ttttatttga ggggtttttg ttttttaaaa aaaaattgaa caaagactac taatgacttt 1380
gtttgaatta tccacatgaa aataaagagc catagtttca aaaaaaaaaa aaaaaaaaaa 1440
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaannng gggg 1484
```

&lt;210&gt; 249

&lt;211&gt; 2422

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2354)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2408)

<223> n equals a,t,g, or c

<400> 249

```
ggtcttgaat aaactactat accaggagggc acattttctc gctcaagcat cttacattga 60
ccttctttta aacaaaaata cgtacaaggc ccacgcgtcc gcggacgcgt ggggagtcct 120
tctaattcttc cttttctaca gacccatctg acctctccct tcctccccag gctgctcctt 180
gccaggccga gctaggtccc aattcttccct cagcctctgc tcctccaccc tataatcttt 240
ttatcacctc ccctcctcac acctgstccg gcttacagtt tcrttccgtg actagccctc 300
cccsacctgc ccagcaattt actcttaaaa aggtggctgg agctaaaggc atagtcaagg 360
ttaatgctcc tttttcttta tcccaaatac gatagcgttt aggtcttttt tcatcaaata 420
taaaaaycca gcccagttca tgrctygttt ggcagcaacc ctgagacact ttacagccct 480
agaccctaaa aggtcaaaag gcctctttat tctcaawata cattttatta cccaatctgc 540
tcccgcacatt aaataaaaact ccaaaaatta rawtcyggcc ctcaaaccac acaacaggay 600
ttaattaacc tcrcttcaa ggtgtacaat aatagaaaaa agttgcaatt ccttgccctc 660
actgtgagac aaaccccagc cacatctcca gcacacaaga acttccaaac gcctgaacyg 720
cagcrgccag gcgttctctc agaacctcct cccacaggag cttgctacac gtgccgaaa 780
tctggccact gggccaagga atgcccgcag ccygggattc ctctaagcc rcgtcccatc 840
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caatactctt ttaagcactc ctttttagtt atccccatct gcccagttcc cttattagga 1260
tgagacactt taactaaatt atctgcttcc ctgactatcc ctggactaca gctgtatctc 1320
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cttaaccac aagtataaga tatctctact cctccttga cgaccgatca tgcaccctt 1440
accatctcat taaaacctaa tcacccttac cgcactcaat gccagtatcc cattccgcag 1500
cacgctttaa aaagattaaa gcctgttatc attgcctgt tacagcatgg ccttttaaac 1560
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ccaaacccat atactctcct atcctcaata cctccctcta ctaccatta ttctgttctg 1740
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ccggtttaca ctgtttctcc aagacatcac agctgatatc tcctgggtgct atccccaaac 2040
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ccttaggcac tctctaatac gatrtcctag gtccctccaa ttcttagacc ttttatacct 2160
gtttttctcc ttctgttatt ccatttagtt tctcaattca tccaaaaccg tatccaggcc 2220
```



atcaccaatc attctatayg acaaagtgtt cttctwacat cccacaata tcacccctta 2280  
ccacaagacc tcccttcagc ttaatctctc ccactctagg ttcccasgct gcccctaate 2340  
ccgcttgaag cagnccctgag aaacatcggc cattctctct ccataccaac ccccaaaatt 2400  
ttggcgggcc aaaacttaaa ac 2422

<210> 250  
<211> 574  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (8)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (38)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (44)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (77)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (558)  
<223> n equals a,t,g, or c

<400> 250  
ttttatgnca aaaaacgcaa cccacgcatg aaaaatgngc caantctttc cttggaatgg 60  
tctgtatttg ggtgaantcc atccagacgt caattaacac ttccctttatt ttgggggttg 120  
ccaactcggt tccccaggat ttaaagacta taacgatgat aaaagtcagt ttgcaccctc 180  
gtcaaaggct tggcccgttg ctttttcctt cccggcaata ctcggttcaa ttaggtcttg 240  
tcccctcatt atctgtgagg actgaattcc acccccgtt ttcaacgcag gctctttgct 300  
cgggaaaagt caaacctct ctcaaaggat caaagagctc agccatagac agagccgcgc 360  
gaggaaagcg gagtcgtgc atcagatgaa aggggccct cagcctcact cctcaccgca 420  
gctcctggga tcttaaagac agggtcagga ggatcaggag ggacaagagg gatggaggcg 480  
aaaggctgga tcttaaatcc aggccggaga caaagccgcg ccaggaggct cgcggcgcgc 540  
ggcccctgtc ctccggcncg agatgaatcc tgcg 574

<210> 251  
<211> 1044  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1010)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1011)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1012)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1013)  
<223> n equals a,t,g, or c

<400> 251  
ggcgggctgg ctcagtaaag cggaggcagc gggggaagat ggcggcgggc gttccacagc 60  
gggcgtggac cgtggagcag ctgcgcagtg agcagctgcc caagaaggac attatcaagt 120  
ttctgcagga acacggttca gattcgtttc ttgcagaaca taaattatta ggaaacatta 180  
aaaatgtggc caagacagct aacaaggacc acttggttac agcctataac catctttttg 240  
aaactaagcg ttttaagggt actgaaagta taagtaaagt gtctgagcaa gtaaaaaatg 300  
tgaagcttaa tgaagataaa cccaaagaaa ccaagtctga agagaccctg gatgaggggc 360  
caccaaaaata tactaaatct gttctgaaaa agggagataa aaccaacttt cccaaaaagg 420  
gagatgttgt tcaactgctg tatacaggaa cactacaaga tgggactggt ttgtgatacta 480  
atattcaaac aagtgcaaaag aagaagaaaa atgccaagcc ttttaagtttt aaggctcggag 540  
taggcaaaagt tatcagagga tgggatgaag ctctcttgac tatgagtaaa ggagaaaagg 600  
ctcgactgga gattgaacca gaatgggctt acggaaagaa aggacagcct gatgccaaaa 660  
ttccaccaaa tgcaaaaactc acttttgaaag tggaattagt ggatattgat tgaaatagca 720  
gtgcttcagc tctaaggata ttagcaacaa tgataaaact tggccttgaa gaaatttaca 780  
caactagtta gaacttgta ctattgtaaa ggaagagtca actggaaaat tcaaggagtt 840  
aataaaattt gtttacttgg tcccagcttt tgagagataa atcccttatg aatccctggg 900  
ctaaaatact ttcctacagc tgtgtaaaat actggtcaag gagaactttt tccttttacc 960  
tcatgttgta aacttaagtg gctcaataaa aattgatcca ctgtcttgan nnnaaaaaa 1020  
aaaaaaaaa aaaaaaaaaa aaaa 1044

<210> 252  
<211> 1029  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (835)  
<223> n equals a,t,g, or c

&lt;400&gt; 252

```
ggcacgagcg gccactgcct gccgcgwgcg gagccggagc ccgagcctga gtggcgcccg 60
gcccagacgtg gggctccttg gccgcggcg cgggcgggcg atgctccaga ggcctgacca 120
gccatggagg ccgaggcagg cggcctggag gagctgacgg acgaggagat ggcggcgcta 180
ggcaaggaag agctagtgcg gcgcctgcgg cgggaggagg cggcgcgccct ggcggcactg 240
gtgcagcgcg gccgcctcat gcaggagggtg aatcggcagc tgcagggcca cctgggagcg 300
atccgcgagc tcaagcagct caaccggcgt ctgcaggcag agaaccgtga gctgcgcgac 360
ctctgctgct tcctggactc ggagcgccag cgcggggcg gcgccgcacg ccagtggcag 420
ctcttcggga cccaagcatc ccgggcccgt cgcgaggacc tgggcggtcg ttggcagaag 480
ctggccgagc tggagggccg ccaggaggag ctgctgcggg agaaccctagc gcttaaggag 540
ctctgccttg cgctgggcca agaatggggc ccccgcgggc gcccagcgg cgccggggga 600
tcaggagccg ggccagcacc cgagcttgcc ttgcccccg gcgggccccg cgacctaggc 660
gatggaagct ccagcactgg cagcgtgggc agtccggatc agttgccccct ggcctgttcc 720
cccgatgatt gaaggcactg ctccctccac gccgacgccc gcccggttg ctccccgagc 780
cccgggaccg ctgtggacct cgggacctgg acgcccgtcct gstgcgcagg aggnccgct 840
ggcatggact aagaaatcct gacaccaaga agggcccctc gctcttgctg gcagggcagc 900
agggggactg aaggctggag cggagggact tgctgggggt tggattgggg gtaataaacc 960
cggacggaag cggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggrcg gccgctcgcg 1020
atctagaac 1029
```

&lt;210&gt; 253

&lt;211&gt; 475

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 253

```
ggcacagcca ggtgctcctg acggacttaa gtgccaaaaa ctgactccat gctaggaacc 60
actgagttct caaccagtga gtttatgatt cctattttta aaataacctt taaagtctga 120
ttataaaaagt agtacatagt ctttgtggaa aattttattaa gtacagtaag tgcagaagaa 180
gaaataaatc actcataatc ccagcagaca gaattaatca ctgtcatttt aggtgtattt 240
ttttgcagag taaaacatgt aaacatttta catagacata aatacaaaca tgataagcat 300
tggacatgga aaatgggcag taaattctgt acatgtgcct tcttgatttt ttgttgatt 360
tttawatcat gcytttttgc aaaatacatt ataaattaaa catggaattt cactagtttt 420
ctgtggtatt cattttccat gggctggaat aatgggtccg tccactatat ggggt 475
```

&lt;210&gt; 254

&lt;211&gt; 1724

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (440)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 254

```
ggcacagtac agcaagaggg caaggacaat tgcttaagtt gacctctggg tccggaatcg 60
cgggcaaaga tggcggcggc cagggtgttg aggcctttgc tacgcgggcc gaggctttca 120
ttgcacaccg cggctaattg cgcgccacg gctacagaaa cgacctgcca agacgtcgcg 180
gcgacccccg tcgcgcggta cccgccgatt gtggcctcca tgacagccga cagcaaagct 240
gcacggctgc ggcggatcga gcgctggcag gcgacggtgc acgctgcgga gtcggtagac 300
```

```

gagaagctgc gaatcctcac caagatgcag tttatgaagt acatggttta cccgcagacc 360
ttcgcgctga atgccgaccg ctggtaccag tacttcacca agaccgtgtt cctgtcgggt 420
ctgccgccgc cccagcgan cccgagcccg agcccgaacc cgaacctgaa cctgcgctgg 480
acctcgcggc gctgcgtgcg gtcgcctgcg actgcctgct gcaggagcac ttctacctgc 540
ggcgcarcgg cgcgtgcacc gttacgagga gagecgaggtc atatctttgc ccttccttga 600
tcagctggtg tcaaccctcg tgggcctcct cagcccacac aaccggccc tggccgctgc 660
cgccctcgat tatagatgcc cagttcattt ttactgggtg cgtggtgaag aaattattcc 720
tcgtggtcat cgaagaggtc gaattgatga cttgcgatac cagatagatg ataaaccaa 780
caaccagatt cgaatatcca agcaactcgc agagtttgtg ccattggatt attctgttcc 840
tatagaaatc cccactataa aatgtaaacc agacaaactt ccattattca aacggcagta 900
tgaaaaccac atatttggtg gtcaaaaaac tgcagatcct tgctgttacg gtcacacca 960
gtttcatctg ttacctgaca aattaagaag ggaaaggctt ttgagacaaa actgtgctga 1020
tcagatagaa gttgttttta gagctaagc tattgcaagc ctttttgctt ggactggagc 1080
acaagctatg tatcaaggat tctggagtga agcagatgtt actcgacctt ttgtctccca 1140
ggctgtgatc acagatggaa aatacttttc ctttttctgc taccagctaa atactttggc 1200
actgactaca caagctgatc aaaataaccc tcgtaaaaat atatgttggg gtacacaaag 1260
taagcctctt tatgaaacaa ttgaggataa tgatgtgaaa ggttttaatg atgatgttct 1320
acttcagata gttcactttc tactgaatag accaaaagaa gaaaaatcac agctgttgga 1380
aaactgaaaa agcatatttg attgagaact gtgggaatat ttaaatttta ctgaaggaa 1440
aataatgatg agatttgtaa ctgtcaacta ttaaatacat tgatttttga gacaaatatt 1500
tcttatgtca acctgttatt agatctctta ctctgctcaa attcatcact gaaagattta 1560
attttagtta ctttttggtg atttaaaaat aattgcattt gtatattgct aactgataag 1620
acaaattgag ttattgagct attaaatgca ctttttaata taaatgcaga aatcccaaat 1680
aaaatgctaa catactgaat tcagtaatta aaagaaccca ctgc 1724

```

<210> 255

<211> 306

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (195)

<223> n equals a,t,g, or c

<400> 255

```

ggcagagcgg ctccctcagct ccaggacctt gctagcagct gccctcagga agaagtttct 60
cagcagcagg aaagcgtctc camtctccct gccagcgtgc atccccagct gtscacggm 120
agagcctgga gaccagctac ctgcagcaca gactccagra gccagcctt ctgtcaaagg 180
cccagaacac ctgtnagcat ctgctgcaga atcaagcgac tctttcttca gaagcagtct 240
caactgcagg cctattttta tcagatgcag atagcagaga gctcctaccc acagccaagt 300
cagcag 306

```

<210> 256

<211> 890

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (862)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (881)

<223> n equals a,t,g, or c

<400> 256

```
ggcacgaggc ccggccgccc cctgccctct ccgctggcca cctgctgccg cccgcgccat 60
ggctggcaaa gcacacaggc tgagcgctga ggagagggac cagctgctgc caaacctgag 120
ggctgtgggg tggaatgagc tggaaggc'cg tgatgccatc ttcaagcagt ttcatttcaa 180
agacttcaac agggcctttg ggttcatgac aagagtggcc ctgcaggctg agaaactgga 240
ccaccatcct gaatggttta acgtgtacaa caaggctccac atcacgctga gcacccatga 300
gtgtgccggc ctttcagaac gggacataaa cctggccagc ttcacgaac aagtagcagt 360
gtccatgaca tagaccctgc ctttcctctt tgaattcttc cgggggaaag ggtgactgaa 420
ctgggagtcg agggaggag ctgaggagcc cttaccctcc caccactccc ctcccaagac 480
ccagccgccc ccgttgagg ctgagtcctt gctgtgggat gtgccagtgt cccaccaaac 540
accaggaatt tagacctttt ccctgcacca ctctcttcat cctgggggct ctgttacact 600
aatttgaata aactctcccc tttctttgca acttcccagc aacaataatg attttcttgc 660
caggccgtct cttgctccct aattcatttc ccaggaagct gtgatacagg gtgaaataaa 720
gtcttgtctt agaaaccagg accctaaacc ccacactatg taatagaaac acatgtgttt 780
ttatgtctca aataaaaacta ttatatcact tggaaaaaaa aaaaaaaaaa aaaaaaaaaa 840
aaaaaaaaaa aaaaaaaaaa anaaaaaaaa aaaaagaat naaaaaaaaa 890
```

<210> 257

<211> 1159

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (84)

<223> n equals a,t,g, or c

<400> 257

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ggcacgaggc ggagggaaga gcgggcgggc gggaggcgcc ggcgccagac gcgaggggaa 60
ggagctacga gtagccgccc agangccgcg garccagcga cgaccgacc agccgagccg 120
ccgcccgcgc cgcgccccca tggcggccgc caaggacact catgaggacc atgatacttc 180
cactgagaat acagacgagt ccaaccatga ccctcagttt gagccaatag tttctcttcc 240
tgagcaagaa attaaaacac tggaagaaga tgaagaggaa ctttttaaaa tgcggggcaa 300
actgttccga tttgcctctg agaacgatct ccagaatgg aaggagcgag gcaactggtga 360
cgtcaagctc ctgaagcaca aggagaaagg ggccatccgc ctctcatgc ggagggacaa 420
gaccctgaag atctgtgcca accactacat cacgccgatg atggagctga agcccaacgc 480
aggtagcgac cgtgcctggg tctggaacac ccacgctgac ttcgccgacg agtgccccaa 540
gccagagctg ctggccatcc gcttcctgaa tgctgagaat gcacagaaat tcaaaacaaa 600
gtttgaagaa tgcaggaaag agatcgaaga gagagaaaag aaagcaggat caggcaaaaa 660
tgatcatgcc gaaaaagtgg cggaaaagct agaagctctc tcggtgaagg aggagaccaa 720
ggaggatgct gaggagaagc aataaatcgt cttattttat tttcttttcc tctctttcct 780
ttcctttttt taaaaaatat taccctgccc ctctttttcg gtttgttttt attctttcat 840
ttttacaagg gacgttatat aaagaactga actcaacatt cagggtgttt ttttttttgt 900
ttctaagttt ttgccctatt gaagatgact tcagaaaatc cattccccag tcatgaaaat 960
```

```
gtactgtgct aacttttctt tccatagtg aaacacttat ttatagtcac caaaaatagt 1020
gaataaaaaa cacatttgga acctggaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1080
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gggggggggac ggacgcgtgg gcggacgcgt 1140
gggcggacgc gtgggtcga 1159
```

<210> 258

<211> 755

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (755)

<223> n equals a,t,g, or c

<400> 258

```
accacgcgt ccggttctag atcgcgagsg ccgccttttt tttttwtta gaagggccag 60
cttactgttg gtggcaaaat tgccaacata agttaataga aagttggcca atttcacccc 120
attttctgtg gtttgggctc cacattgcaa tgttcaatgc cacgtgctgc tgacaccgac 180
cggagtacta gccagcacaa aaggcagggt agcctgaatt gctttctgct ctttacattt 240
cttttaaaat aagcatttag tgctcagtc ctactgagta ctctttctct cccctcctct 300
gaatttaatt ctttcaactt gcaatttgca aggattacac atttcactgt gatgtatatt 360
gtgttgcaaa aaaaaaaaaa gtgtctttgt ttaaaattac ttggtttggt aatccatctt 420
gctttttccc cattggaact agtcattaac ccatctctga actggtagaa aaacatctga 480
agagctagtc tatcagcatc tgacaggtag attggatggg tctcagaacc atttcaccca 540
gacagcctgt ttctatcctg tttaataaat tagtttggtg tctctacatg cataacaaac 600
cctgtccaa tctgtcacat aaaagtctgt gacttgaagt ttagtcagca cccccaccaa 660
actttatttt tctatgtgtt ttttgcaaca tatgagtgtt ttgaaaataa agtaccatg 720
tctttattag aaaaaaaaaa aaaaaaaaaa aaaaan 755
```

<210> 259

<211> 714

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (665)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (704)

<223> n equals a,t,g, or c

<400> 259

```
gtctatttagc ttttacctca aaattttaag ccagaactat catctttggt tttttatttt 60
ctatctttta acatttatct gtgaagtgc aaatggccta cagctgtgag agcaaatgga 120
catctcctcc tgaactctga gaagatgtca aaatccacag gcaacttcct cactttgacc 180
caagctattg acaaattttc agcagatgga atgcgtttgg ctctggctga tgctgggtgac 240
actgtagaag atgccaaact tgtggaagcc atggcagatg caggtattct ccgtctgtac 300
```

acctgggtag agtgggtgaa agaaatggtt gccaaactggg acagcctaag aagtgggcct 360  
gccagcactt tcaatgatag agtttttgcc agtgaattga atgcaggaat tataaaaaaca 420  
gatcaaaaact atgaaaagat gatgttttaa gaagctttga aaacagggtt ttttgagttt 480  
caggccgcaa aagataagta ccgtgaattg gctgtggaag ggatgcacag agaacttggt 540  
ttccgggttta ttgaagttca gacactttct ctcgtctccat tctgtccaca tttgtgtgag 600  
gcacatctgg gacactcctg gggaaagcct gacttcaatt atggaatgst ttcattgggcc 660  
tgtgngmagg gtcctgttta atggaagttt ttaattacac tccntcacag tatic 714

<210> 260

<211> 525

<212> DNA

<213> Homo sapiens

<400> 260

ggcttttacgg ctgcgagaag acgacagaag ggggtgggtgg tcgcgagrga gccggaaaga 60  
tggttggttac cagatctgca cgggctaagg ccagcatcca agccgcgtcg gctgaaagtt 120  
ccgggcaaaa gagttttgct gctaattggga ttcaagcgca tccagaaagt agtactggat 180  
ctgatgcccc aactactgct gaatcacaga ccactgggaa gcaaagttta atccctagaa 240  
ctcctaaagc tagaaagagg aagagcagaa ctacaggctc actaccaaag gggactgaac 300  
catctacgga tggagagacc tctgaggcag agtcaaatta ttctgtgtct gagcaccatg 360  
ataccatttt aagggttaact aggagaaggc agatcttaat tgcattgctc ccagtgtcca 420  
gtggttaggaa aaagccgaaa gtaactccaa caaaggagtc ttacactgaa gaaatagtgt 480  
ctgaagcaga atctcatggt tcagggtattt cttaggaattg tgctt 525

<210> 261

<211> 3000

<212> DNA

<213> Homo sapiens

<400> 261

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<210> 262

<211> 966

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (935)

<223> n equals a,t,g, or c

<400> 262

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tatagcatgt catcttaaaa gccttatatt ttccctcaaaa tattaacttt attttctcc 540  
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cattaaaatt tgaaatctaa gtgaattact tcaagctgat ttcttaggtc aaggagagat 780  
tatggtcctt aaatgcctga taagggtcaca tacacaattt caagtgcatt atagtaaatac 840  
catgtgwaca gctcctacag ctactaacct gcttctgccc tcacgggtag cgtgcacaat 900  
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<210> 263

<211> 2738

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (762)

<223> n equals a,t,g, or c

<400> 263

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ttgacaatat ttggtgcagt gacatacttt actatcaaatt ggatggtaga tgcaattgat 180  
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cctcttaata tgcattgttac ttggagtgat atagcagggt tagatgatgt cattacggat 360  
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<210> 264

<211> 1520

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (18)

<223> n equals a,t,g, or c

<400> 264

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<210> 265  
<211> 1568  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1318)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1320)  
<223> n equals a,t,g, or c

<220>  
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<222> (1469)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1482)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1502)  
<223> n equals a,t,g, or c

<400> 265  
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<210> 266

<211> 545

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (338)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (394)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (508)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (540)

<223> n equals a,t,g, or c

<400> 266

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catcatcaca ttgaagtttt ctgtctaaag gaaggttcca gctacctgtt acccttttgc 180  
taaacacagt tgcagtgttg cagtgtattt catgacaaaa gtgcactcta gttttctgtg 240  
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acatagtgt tttgacctgt gggaaatctc atcttggnnta ccatgggtgt gcacagacca 360  
tcaggaagaa ctgaaaagtt caggcaactt gagnaataa aagtcaccac cmgcaaggar 420  
gctgtctaaa ataaccggra gattattamc ccagcacgtg gragartgtg ctagtgggta 480  
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<210> 267

<211> 762

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (712)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (740)

<223> n equals a,t,g, or c

<400> 267

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gatgaaatca tagtagatat agccacaaaa cgtaagcagt atcccagaaa gatcctggaa 420  
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gattgaaacc acaccaacag aaactggtth caggaaaaac cttttacgtg gnacttgaaa 720  
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<210> 268

<211> 1433

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (893)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (947)

<223> n equals a,t,g, or c

&lt;400&gt; 268

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ccaaagcggg ccgcccgagc gtccactcca agcctgagca tccacacaat tccagtgggc 1320
cctcggtgcc tgctgtgaac tgctttccct cggaatgttt ccgtaacagg acattaaacc 1380
tttgwtttta cttccgtgaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggg 1433
```

&lt;210&gt; 269

&lt;211&gt; 2278

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (205)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (335)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (2277)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 269

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tcccacgtgt tatatcatga atttnttggg cccaaagtca tatatagaat tttttaaata 240
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aaacaaaaar gaggtatgtg ggttacatgt atgaaacact ggatcagaag gaccagtat 420
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aatgtgtatt tagaatattt gtataactgt gtaaaataaa aaaggaatta tgtggtcagt 2160
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<210> 270

<211> 2533

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1280)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2514)

<223> n equals a,t,g, or c

<220>

&lt;221&gt; misc feature

&lt;222&gt; (2531)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 270

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tgctggaagc gtcgaagctc agcggggccg cggacactga cctgtgctta gaactcatcc 180
tgccccgcag agcctgccgc gagtccctgg cgtccctctgt ggcgggctct tggagccact 240
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caatgtggat tccctcttct acgctgcccc ggccagccag gccctctcag gatgtgagat 600
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&lt;210&gt; 271

&lt;211&gt; 1618



<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1612)  
<223> n equals a,t,g, or c

<400> 271  
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attactgtac ttggaagtat gttgtgtgtc ccaaagtgtga acgaagtatt gttagaattt 180  
attagatcag cttcttttgg gatcaaagat tggaaatcct agtcatagat attcactgga 240  
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tcccaaaaata ttttctttta rgtcagcaca gtactgtata tgaatcttta atgtgggtatc 360  
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gtccgggtc ctgttgcccc ttcaagcagt acatgccaaa ttataaatag gtgctactgg 480  
ccttgagcat atcactgtgg gacagttccc caattgtcaa gtgttttagat atgtagacta 540  
ttgccatttg ttttttgtt ttggttttgc tttgtgtctg aagctgaatt gatttctttt 600  
ttttgaatgt gaaagttgaa tttcaaactg agtcatttct tacagatggc caagacagaa 660  
aattgtggct aggttgactg agaactgttg tcttccatgt attaacacaa ttaagctttt 720  
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aatgttcatt cctgttttct cttaagagaa tgtgctgtgt actaaatata ggccacatag 1020  
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atcctgtaaa tattcatgat agtctgttta tacccttttg tatatcgttg atactggatt 1560  
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<210> 272  
<211> 470  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (395)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (404)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (425)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (429)  
<223> n equals a,t,g, or c

<400> 272  
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accctataaa gcacaaaatc gagtgggtaa aaagtatgaa accagcactg tttctacttt 180  
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catttgattt tgtttttccc tcagttgact ttccatcttc agttcgaata catttaattg 360  
acaaaaatgg cagacattga gtgagtactt cttgncccag tttnaattct ttccttcctt 420  
ttttncccng gttgtgagtt aattgggtca acttctgggt tcagggtttt 470

<210> 273  
<211> 983  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (879)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (915)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (930)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (967)  
<223> n equals a,t,g, or c

<400> 273  
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gcaccttgca ggaggagact actgtgtctc tgaatactgt ggacagcatt gagagttttg 240

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aaacacagcc agagcgatat attcatctgg agaacccttt ggccagggtct tactttgatc 480  
ctcgtgaggc ataccagat ggaagtagca aagaaaagag aagagcagca attgcccagg 540  
ccttagctgg cgaagtcagt gtggtgcctc catctcgtct catggcattg ctgggacagg 600  
cactgaagtg gcagcagcat cagggattgc ttcytcctgg tatgaccata gatttgtttc 660  
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aatcagaaaag gatccttaagt taccaggccc aagattaant ttatggatga tgggttgatg 900  
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<210> 274

<211> 2006

<212> DNA

<213> Homo sapiens

<400> 274

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<210> 275  
<211> 1376  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (4)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1368)  
<223> n equals a,t,g, or c

<400> 275  
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cactacacac aatattccac agactttcac taccgccatt cgctgcacaa agtgtggaaa 180  
agggtgtcgac aatatgccgg agttgcacaa acatattcctg gcttgtgctt ctgcaagtga 240  
caagaagagg tacacgccta agaaaaaccc agtaccatta aaacaaactg tgcaacccaa 300  
aaatggcgtg gtgggttttag ataactctgg gaaaaatgcc ttccgacgaa tgggacagcc 360  
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ccccacccaa gtcccacttc cctcctcctc cttcaggctc aagcagaacg tcaagtttgc 840  
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<210> 276  
<211> 2594  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature

&lt;222&gt; (2198)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 276

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caaaaaaaaa aaaa 2594
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&lt;210&gt; 277

&lt;211&gt; 679

<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (438)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (617)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (653)  
<223> n equals a,t,g, or c

<400> 277  
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tcagccgtgc ggcytcctg ctgcgcgccc tctgargccg tcaagtccgc cgccawcccc 600  
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ccaaaccgtg gaacccaaaa 679

<210> 278  
<211> 1478  
<212> DNA  
<213> Homo sapiens

<400> 278  
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ggacttccaa ggcgcctggc agtcgcctc ggggcccagg ccctcctggg ggtgccaag 720  
atgctgctgc actcagaaca gcaccaggc cagctcaagg acaacgtcag ctctcctggg 780

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gattaaaatg tcaatgtaat ctaaaaaaaa aaacaaaa 1478

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<210> 279

<211> 2321

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (474)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (483)

<223> n equals a,t,g, or c

<400> 279

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tggtcttggg ggactggtgg cgggcggccc cgaagccttc gcggccttcc tgcgacgcga 180
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aaaataaaac tactttctgt ttatctcttt agaaaaaaa a 2321
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<210> 280

<211> 1693

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (200)

<223> n equals a,t,g, or c

<400> 280

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atctcggggc ccagaccagt cgattgggag gtccgcctc ccttcagcg acttggtctg 180
tgttttgcca gttgccgcn acaacagtca cttccgggaa ggggtctgc gaatctcctt 240
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gttattcaag gttttagaac ttaataaata cctagtcaga aaaaaatgtg taaatcgttt 1680  
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<210> 281

<211> 258

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (42)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (64)

<223> n equals a,t,g, or c

<400> 281

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gctnccggca cccatgggtc cagtgccttg gaatggagac ggccagttct ggggccagat 120  
gtggtgctct ggaatccagt cccatttctt tcctggccac gagctgtccc agcggcctct 180  
tcagccgcat tcagccccta cttacctggg gaccccggtt ggggcacgag aagcaccagg 240  
ggggtagggg cccaaaagg 258

<210> 282

<211> 1764

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1764)

<223> n equals a,t,g, or c

<400> 282

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tgctgagtc tccctgtctg gcccctgcag cccagccct gcttttcatc cccacccct 180  
gcaaacatgg aggagcccc tccttctcac ctcggtctcc tagcccctga catggagaas 240  
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gtgggaaaaa aaaaaaatc agaccaagaa atgagcctga aattcagtgt ttaccatggc 540  
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<210> 283

<211> 799

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (750)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (760)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (769)

<223> n equals a,t,g, or c

<400> 283

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gactcacttt tctcttctctg aatttgaacc accgtttcca tcgtctcgta gtccgacgcc 180  
tggggcgatg gatccgttta cggagaaact gctggagcga acccgtgcca ggcgagagaa 240  
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gcgagctaga cagccacttt cagaagcaag taaccagcag cccctctctg gtggtgaaga 360  
gaaatcttgt acaaaacccat cgccatcaaa aaaacgctgt tctgacaaca ctgaagtaga 420  
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<210> 284

<211> 1489

<212> DNA

<213> Homo sapiens

<400> 284

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ctcttgatca gaatttccag gtggcctacc cagactactg cccgctcctg atcatgacag 180  
atgcctccct ggtagatttg aataccagga tggagaagaa aatgaaaatg gagaatttca 240  
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taattggtag tgtagaagtg aaaaaggtaa tggcatgccc caggtgtatt ttgacaacgg 360  
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gcctgtktga tccttctgag agggaattgt acaagttgtc tccacttttt gggatctatt 480  
attcagtgga aaaaattgga agcctgagag ttggtgaccc tgtgtatcgg atggtgtagt 540  
gatgagtgat ggatccacta ggggtgatatg gcttcagcaa ccaggaggga ttgactgaga 600  
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gctttaaaaa taattaagat catcaaaaat gctattttga atgttatcat ggctattaca 840  
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<210> 285

<211> 702

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (695)

<223> n equals a,t,g, or c

<400> 285

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tggattcatg gagtagcctg gactgtttca tagttttcta aatgtacaaa ttcttatagg 180  
ctagacttag attcattaac tcaaattcaa tgcttctatc agactcagtt ttttgtaact 240  
aatagatttt tttttccact tttgttctac tccttcccta atagcttttt aaaaaaatct 300  
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ttagggcaga ttttggttgg tttttacata gttgagattg tactgttcat acagttttat 480  
accctttttc atttaacttt ataacttaaa tattgctcta tgtagtata agcttttcac 540  
aaacattagt atagtctccc ttttataatt aatgtttgtg ggtatttctt ggcatgcatc 600  
tttaattcct taccctagcc tttgggcaca attccygtgc ttcaaaatga gagtgacggc 660  
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<210> 286

<211> 1175

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1153)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1166)

<223> n equals a,t,g, or c

<400> 286

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cttcaaaatt atttgggcat agtgctctat gtttaataaaa ggtttttata gatgttttat 180  
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gtgatttggg tgctgttctg tgatctaaaa caactcttat tgaattgtat ttactcccta 360  
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tcagcagatt cctttacttt tgtttgtggg aggtaggaat tgttttaatg catttttaac 540  
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aaaattgcag atttaggagg cctgccaaat taacagtctc atcagggtgat tcttttcaac 660  
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<210> 287

<211> 2873

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (829)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2870)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2871)

<223> n equals a,t,g, or c

<400> 287

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tgcaggtctt aaacgacaaa aatgtcagca atgaaaaaaa tacagaaaat tgcgacttcc 180
tgtttttcgcc accagaagtt accggaagat cgtctgttct tcgtgtgtca cagaaagaaa 240
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atccacagac gcacaggatt ctaagtccta gcatggccag caaacttgag gctcctttca 360
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<210> 288

<211> 2104

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (44)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (497)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1323)

<223> n equals a,t,g, or c

<400> 288

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gtaaggggtg ctgtgcgact gcggccattt gtggatggaa cagcgggagc aagtgatccc 180  
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<210> 289

<211> 1251

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1194)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1211)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1215)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1231)

<223> n equals a,t,g, or c

<400> 289

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caagctgggtg tcgctgggga cctgcttttg aaaattcact aaaaccacaca agtttcgggtt 420
gcacgtcaca gctctggatt accttgccacc ttatgccaaag tataaagttt ggataaagcc 480
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<210> 290

<211> 1591

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (768)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1538)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1560)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1562)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1568)

<223> n equals a,t,g, or c

<400> 290



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ttgtttacat tatgttctag actggccccc tgaatctcca gacaaccaat atcacttaaa 180
taagtgatag tcttaatact agtttttaga ctagtcatgt gagaacagat gattgatgtc 240
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<210> 291

<211> 2386

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (448)

<223> n equals a,t,g, or c

<400> 291

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gattttttgc tcccttcaaa gatttctgta gaaataactt attttttagt attctacagt 1440  
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attcactaat aatagactgg tgctgtaact caagcatcaa ttcagctctt cttttggaat 1560  
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taaggatttt tatatggcct tgtatgaggg gagtttgaat gttaataaac atgttttcca 2340  
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<210> 292

<211> 983

<212> DNA

<213> Homo sapiens

<400> 292

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tggcacttag gggaagagag cagcaaata gagatttacc tttatctcc cagcgagcga 240  
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983

<210> 293

<211> 2655

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2595)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2611)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2641)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2651)

<223> n equals a,t,g, or c

<400> 293

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aaagactggc aatcagaaac catagagtat aaagatgatc aggacatgca tgcttttaggg 180  
aaaaagcaca ctcatgagaa tgtgaaagaa actgccatcc aaacagaaga ttctgctatt 240  
tctgaaagcc cagaagagcc actgccaac cttaaaccga agcctaacct gagaacagag 300  
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<210> 294

<211> 1738

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (854)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1679)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1693)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1717)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1729)

<223> n equals a,t,g, or c

<400> 294

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caacctgat gcaattgtag ttcgaaagat ggctatctca gctgttgctg gtatccttaa 180
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aaaactatac caagaactaa aaaagaatgg gagtcaagtt gctttgtgga aaaaactcac 360
tggggatact acacctggcc aaagaatatg gttgtttatg ctggtgtgga agagcagcct 420
aagcttgcca gaagcagggg ggatatgaca gaggcagaac agattatatt tgatcatttt 480
tctgatccta aatttggtga gcagttaatt acttttctat cattagaaga cagaaaagga 540
aaagataagt ttaatccacg acgtttttgy ctctttaagg gtatattcag gaattttgat 600
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cttttgggag ggacgaacca actgggaggg ttccggagaa atgggctggc ctaacttanc 1680
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<210> 295

<211> 1020

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (31)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<400> 295

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ctgctgttcc ctccsgtggt agcacgtcca gctgcacccg gaggcgatg gctgccaaca 180
cgtggtggaa tttgacttcc tggggaagga ctgcatccgc tactacaaca gagtgccggg 240
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gcaggccacg gacaaggagg agaacaagca ggtggccctg ggacgtcca agctcaacta 780
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tgaattctaa cgacgagccg tgttgaaact tcttttgtat gtgtgtgtgt ttttttctact 960
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```

<210> 296

<211> 684

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (660)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (675)

<223> n equals a,t,g, or c

<400> 296

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gctgagtggc aaactgccag tctatatact gcatttagtc tataggctgt tttgtttggc 300
ccacaaagca ttttattatt taagtttatg ccaacattta agaatcaaga atttcccaga 360
cattcagatt tctgacttca attgaaaatc tgacagtata aaccctatta tattcctgca 420
tggcataaaa tcttcagttg ctgaatggtg atatccactt ttagaaagag tactctaccc 480
tgttctgcat tcatacaacc taagccaacc cgcccttcac catcccactt ctctttcagg 540
ttatctgctt aggtctggtg gcatttgtgt ttataaacct tgaactcaag ctgctagatg 600
gtcagttgca ttgtgaactg aactatctga atgatttttc attgtaaata tatagctatn 660
ggaccacttt aaatncccc tttt 684
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<210> 297

<211> 1838

<212> DNA

<213> Homo sapiens

<400> 297

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<210> 298

<211> 1635

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1609)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1635)

<223> n equals a,t,g, or c

&lt;400&gt; 298

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aaaaaaaaaa aaaaan                                     1635
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&lt;210&gt; 299

&lt;211&gt; 868

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (790)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (857)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (860)

&lt;223&gt; n equals a,t,g, or c



&lt;400&gt; 299

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&lt;210&gt; 300

&lt;211&gt; 547

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (526)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (542)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 300

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tggaatactca gcgtcgctgg cagccgctgt acttggaat tcgaaatgag tcccatgact 180
atcctcatag agtggccaag tttccagaaa acagaaatcg aaacagatac agagatgtaa 240
gcccatatga tcacagtcgt gttaaactgc aaaatgctga gaatgattat attaatgcca 300
gtttagttga catagaagag gcacaaagga gttacatctt aacacagggt ccacttccta 360
acacatgctg ccatctctgg cttatggttt ggcagcagaa gaccaaagca gttgtcatgc 420
tgaaccgcat tgtggagaaa gaatcgagt gtgaaacaga acaatatctc actttcatta 480
tactacctgg ccagaatttg gagtcccttg aatcaaccag cttcanttct caatttcttg 540
gntaaag 547
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&lt;210&gt; 301

&lt;211&gt; 865

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 301

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aaataaaaatt ttataaccac ttctt 865

<210> 302

<211> 815

<212> DNA

<213> Homo sapiens

<400> 302

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tttgtcctct gtgaagaatt ataaaagga ggggggaaag gattcgcctc tectacagaa 240  
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attaggaaaa tgtgttttgt agttctggat aaactatttc atccgctgtt tcttcccaa 360  
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ttcgcatcat ggtctccatg tgtaccgcca aagtcaatta tgtttgaaag cttttggtgg 480  
atgttatggg gcaaagttat gatttacaca gaagcaactg ccaaattctgt ggtgcaacca 540  
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ctacagtact cttccttatt gcaccatttt tgtattaacg tagaaactaa gcatacagaat 660  
ttatgaacaa agaatatgtt atttttccyt ttgcyctaaa atactgagga tttggggaag 720  
caattcyttt ttaaaaaaat tttggaataa ctaycttttg rtacacattc gggsggttac 780  
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<210> 303

<211> 1919

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1907)

<223> n equals a,t,g, or c

<400> 303

actgacagta cggctcgaat tcccgggtcg atccacgcgt ccgaggacgt ggsacaaaaa 60  
cagatgctag gaagcttggc ttctctttct tgttgacct tttttgaacc aacatctttt 120  
ttattatatt cagagtatgt ttttaagtgt atcttaatat atacattttt taggacatct 180  
taaattctaaa caaaaaataa aatgaacatc tcttgaaacc tgttaaaaca accagttaaa 240

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gccacagatg gctttcaggg cagtagcagc agaggccagt ggactctgag gactcctgag 300
gggcggggcg tgtagccagc caggtgcatg ccgggaccat ggcccccata cttggctgct 360
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caaggcagcc tgaacactca gttgcagggc cgggcttgcg gtgggtgacc cagagccacc 540
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ctatagraaa agtaaaagat cagggttatac tttagggttag gggttctatt tattcctgtt 720
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tttggtgaa ctacaagtgt aggccaccat tataatttat aaatacagca tacttcaaaa 1620
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taaagtatgt tgagcagaat gttgtacttg aaaatgctat aagtgaatg gtatgaaata 1860
aattctgact tatgaaaaaa aaaaaaaaaa agtcgacgcg gccgganatt tagtagtag 1919
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<210> 304

<211> 157

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (112)

<223> n equals a,t,g, or c

<400> 304

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aggtgtacac cctgcccagc cacaagccga tttttaaaag gtcaaagtct atgacagcca 60
ttttacagga aaaaaaaaaa ttgtatagtt gtgggtgacgt tcctcacaca gngcaccagc 120
ttcaggggagt ctgtcccttg cagaccctg aaccggg                                     157
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<210> 305

<211> 343

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (270)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (291)

<223> n equals a,t,g, or c

<400> 305

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aatgcagtggt ttctgattac tgatctctca ttacccaact atctgatggc atcttcgggtt 60
ggactgcttc ctaccagct tctgaattct tacttgggta ccacctgag gacaatggaa 120
gatgtcattg cagaacagag tkttagtggg tttttgttt tttgtttaca gattattata 180
agtataggcc tcatgtttta tgtagttcat cgagctcaag tgggaattgaa tgcagctatt 240
gtagcttggtg aaatgggaac tggaaatctn ctctgggtta aaggcaatca nccaaatacc 300
agtgggctct ttcattctac aacaagagga ccctaacatt ttt 343
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<210> 306

<211> 696

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (553)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (585)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (593)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (649)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (661)

<223> n equals a,t,g, or c

<400> 306

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cagcgccagc cccagcgag tgacagccgc cgggcccct cgacctcgg atagttgtaa 180
agaagaaagt tctacccttt ctgtcaaat gaagtgtgat ttaattgta accatgttca 240
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ttccggactt aaactggtaa aacctgatga cattggaaga ctagtttcct acaccctgc 300  
atatttggaa ggttcctgta aagactgcat taaagactat gaaaggctgt catgtattgg 360  
gtcaccgatt gtgagcccta ggattgtaga acttgaaact gaaagcaagc gcttgcataa 420  
caaggaaaat caacatgtgc aacagacact taatagtaca aatgaaatag aagcactaga 480  
gaccagtaga ctttatgaag acagtgctat tcctcaattt ctctacaaag tggcctcagt 540  
gaccatgaag aangtagcct tctggaggag aaattcgggtg acagnctaca atnctggctg 600  
gttacaaatc caaggcccag acccaatatt cccaacaaaa aacttttgnt tggccagggtc 660  
nttcaatttt tgaaaaaaag tgggttttgg tttaac 696

<210> 307

<211> 396

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (394)

<223> n equals a,t,g, or c

<400> 307

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tyttaatatg ctaatgtgga ggacacctag ttaccctaag ggagaaaagc aaggcaagga 180  
cccactgcac agcaagtcc cccttgggaag cccacgggcg cactgcccac aaatgcacat 240  
aatctctgca gaaatacaaa agccctaattg ctggctgcac tggggacaca ggtaggagga 300  
aattttcccc tgtaagcagt tttgaattct gaactatgtg gacagamcac caattttaaa 360  
acaatgaaag tgagttggct gggcacatgg tttngc 396

<210> 308

<211> 549

<212> DNA

<213> Homo sapiens

<400> 308

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cccagctgct gccttcatat tgaagggttt tgagttttgt ttttggctct aatttttctc 180  
cccgttccct ttttgtttct tcgttttggt tttctaccgt ccttgtcata actttgtgtt 240  
ggagggaacc tgtttcacta tggcctcctt tgcccaagtt gaaacagggg cccatcatca 300  
tgtctgtttc cagaacagtg ccttgggtcat cccacatccc cggaccccg cttgggacccc 360  
caagctgtgt cctatgaagg ggtgtggggg gaggtagtga aaagggcgg agttggtggt 420  
ggaaccaga aacggacgcc ggtgcttggg ggggttctta aattatattt aaaaaagtaa 480  
ctttttgtat aaataaaaga aaatgggacg tgwaaaaaaa aaaaaaaaa aaaaactcga 540  
gactagttc 549

<210> 309

<211> 1778

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature  
<222> (1704)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1744)  
<223> n equals a,t,g, or c

<400> 309  
ctgtcttggt cttccagggt gctgggatta caggcgtgag ccactggaac ctggccttgt 60  
tttgccttat tttttctctt acatgaagta aagcgctttg gtcaaacaca caaaaatact 120  
gccttggtact ggtggttggg ttcatttagt gatcacacac agtggtctac ttggccttgta 180  
aaatggtgcc ttggataggg tgagtttgga taagtatgta tgtatgtatg agttatagca 240  
aaattaagta gattgaatca agtccatgca aaagcaataa aacagtttta attttttaaat 300  
tttttaaaaa ttaaaacttt aataaaacag tttttaattt tttgctagggt tcttttaaaa 360  
aatgatgtaa cttacatgga agtcctcaca ggactttttt ctttcctgga actattgaaa 420  
tgtaatttag gatgatttga tcttccatct caagttgtca acatggctgt gtcattctgg 480  
cttaccatag ttttatttaa caaaattcta gtcaagggat aagggcataa tgaagacaag 540  
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cccattgtaa aataatattt gcagtcaaat ggtttttctt gctgtaagtc ctggtgtagc 660  
tatgttttag gtagtggttc tcatctacct tggagtgcac aagacttacc tagcaggctt 720  
gttttaaaaag ttcagattcc tagctttgta cccagggtt gcctcagggt gtatgggctg 780  
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catcgaatgg gaagtaccaa ggagaaagta caattcagta ttgtctggag gcaagtggac 900  
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atanctcttc tatagtgtca ctaaattcaa ttcactgg 1778

<210> 310  
<211> 771  
<212> DNA  
<213> Homo sapiens

<400> 310  
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acagtgggtt gagaggctgg gaggggtgag gggaagataa acttttataa agctcttata 120  
tttcatttca atcagttaaa aatacttgct cagtgtaca attttgcttc tcagcttcca 180  
ctctaattat gttgtgccat taagcaattt agctaattct gacatttctt agattcataa 240

tgttaggagc atttaatctg tatttttacia gtttaggaagc agaggatcag agatgggaaa 300  
ggactagccc aaggccaaca ttaacaagcc ctctaacaaa aacttttacia tacattttatg 360  
ttgaatggaa ctccaagatc tcacctctcc atccaggaat ggagtccatg taatcaaagt 420  
gaacttaaaa ataggacagt ttcaacaagt caggagattc acagcaactg atcaaagggg 480  
gtccagtcaa cgtgagcaag cgtgattatg atgaggaagc cccctctgct ttaatccaca 540  
caaggaacgt aacctgaagt aacctgatgt taaccaatct gctgtgtcta ctatgctgtt 600  
tccttgttcc tgctagtgtc gctttacaaa tgcagaccat tctatcatac ctggcrgggc 660  
ttctgtttta ttttgtaggc tggatgctac ccagttcatg aatcgctaataaaaagccaat 720  
tagatcttta taaaaaaaaa aaaaaaaaaat tactgcgggc gacaaggga t 771

<210> 311

<211> 1419

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (21)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (26)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1005)

<223> n equals a,t,g, or c

<400> 311

tcttgaaaac ccgggtcgac nggacncgtc cgcgaaggcc agcccttcga atactttgtt 60  
tatggagctg cctgttccga ggttgaaata gactgcctga cgggggatca taagaacatc 120  
agaacagaca ttgtcatgga tgttggtcgc agtataaatc cagccattga cataggccag 180  
attgaagggtg cattttattca aggcattggra ctttatacaa tagaggaact gaattattct 240  
ccccagggca ttctgcacac tcgtggtcca gaccaatata aaatccctgc catctgtgac 300  
atgcccacgg agttgcacat tgctttgttg cctccttctc aaaactcaaa tactctttat 360  
tcatctaagg gtctgggaga gtcgggggtg ttcctggggt gttccgtgtt ttctgctatc 420  
catgacgcag tgagtgcagc acgacaggag agaggcctgc atggaccctt gacccttaat 480  
agtccactga ccccgagaa gattaggatg gcctgtgaag acaagttcac aaaaatgatt 540  
ccgagagatg aacctggatc ctacgttcct tggaatgtac ccatctgaat caaatgcaaa 600  
cttctggaga aaacagagtg cctcttccca gatggcaatc tgtcctatct ctgtgctgga 660  
agatgctaga tctgaaagac agagtttcca cagttcagaa atcatccac agtggtgtct 720  
ttctatggag ctgatttaaa gtattccatt tagatttgat agatatgctt aagcaatcta 780  
taaatacatt tcaatgttat aaacactaat tggtttcctc tagggtgata ttcgtcatta 840  
ctctgtctct tcaatccatc cagctaaatg gaatagggtg tgacttgcat gtgactccta 900  
cttggtctct atccaccaac agaaattata ccatatagtg aaaggcaatt ttctaaataa 960  
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ccttcctctt gtcagaatga atatagacac tgtatctaag tgggaccaa gaaaaaatag 1080  
cgaactttca ccaaagtttt catgaaaacc caaagcttt aaaagktact atcaagaaat 1140  
tgaaaggaaa cccacagaat aggataaaat atttgtaaat catatatattg ataaaagtct 1200

tgtaaccaga tacataaaga gctcttacaa ctcaataaaa ggcaagtaat ttaaaaaatag 1260  
gcaaaaagaat tgctggatgg tatggtagtt ctatttttag tttttaccct aactactctg 1320  
acttgatcat ttaacattct gtgtatgtaa caaaatatca catgcataaa tattatgtat 1380  
caataaaatt ttttaatggg caaaaaaaaa aaaaaaaaaa 1419

<210> 312

<211> 526

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (525)

<223> n equals a,t,g, or c

<400> 312

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taggtcatcc agcaggatta ggaagagaag cattgtgaga aacaggtttt gggttttgct 120  
gaaatttgct tgtcagcatt gcatcacttt tccttaactg ttctctaagt actgatgtct 180  
ttcaaatga ctcagakcat actccttatc tttgagcaga atattttgaa cagaaaawta 240  
agccattttc atttatatac ctaattcaat aggtttataa ataaaagggc aaatcctcac 300  
gaataatata gtacagtga aaattgctct ccccttagga actgaggaat agaaaaacaa 360  
tttcctctta cattgtttat agtaggtagc ccttgaaaag aaaatcactt atccctgcc 420  
cccccatggc cctcataaca agtagggaa actgaaattg ctggaaattt aggattctwa 480  
ggcamcaggc wgggaaatag ggtcctcata cctgacctt tctnc 526

<210> 313

<211> 2435

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2408)

<223> n equals a,t,g, or c

<400> 313

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tgccgggggt cctggttcgc atcctccttc tgctgctggt tctgctgctt ctgggcccta 120  
cgcgcggtt gcgcaatgcc acccagagga tgtttgaaat tgactatagc cgggactcct 180  
tcctcaagga tggccagcca tttcgctaca tctcaggaag cattcactac tcccggtgct 240  
cccgttctta ctggaaggac cggctgctga agatgaagat ggctgggctg aacgccatcc 300  
agacgtatgt gccctggaac tttcatgagc cctggccagg acagtaccag ttttctgagg 360  
accatgatgt ggaatatttt cttcggctgg ctcatgagct gggactgctg gttatcctga 420  
ggcccgggcc ctacatctgt gcagagtggg aaatgggagg attacctgct tggctgctag 480  
agaaagagtc tattcttctc cgctcctccg acccagatta cctggcagct gtggacaagt 540



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ggttgggagt ccttctgccc aagatgaagc ctctcctcta tcagaatgga gggccagtta 600
taacagtgca ggttgaaaat gaatatggca gctactttgc ctgtgatttt gactacctgc 660
gcttcctgca gaagcgcttt cgccaccatc tgggggatga tgtggttctg tttaccactg 720
atggagcaca taaaacattc ctgaaatgtg gggccctgca gggcctctac accacggttg 780
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2435

&lt;210&gt; 314

&lt;211&gt; 2543

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (2538)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 314

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<210> 315

<211> 828

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (828)

<223> n equals a,t,g, or c

<400> 315

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<210> 316

<211> 1608

<212> DNA

<213> Homo sapiens

<400> 316

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<210> 317

<211> 1057

<212> DNA

<213> Homo sapiens

<220>  
<221> misc feature  
<222> (958)  
<223> n equals a,t,g, or c

<220>  
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<222> (966)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1035)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1053)  
<223> n equals a,t,g, or c

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<210> 318  
<211> 1336  
<212> DNA  
<213> Homo sapiens

<400> 318  
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<210> 319

<211> 496

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (433)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (439)

<223> n equals a,t,g, or c

<400> 319

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aagagttcca aaataataat gaccttgagt tacaacaaaa atgtattaat gtactaagca 180
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ttcatcacta caaatg 496
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<210> 320

<211> 1756

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (1718)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1721)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1733)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1750)

<223> n equals a,t,g, or c

<400> 320

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<210> 321  
<211> 588  
<212> DNA  
<213> Homo sapiens

<220>  
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<222> (512)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (543)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (567)  
<223> n equals a,t,g, or c

<220>  
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<222> (574)  
<223> n equals a,t,g, or c

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<210> 322  
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<212> DNA  
<213> Homo sapiens

<220>  
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<222> (10)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (15)  
<223> n equals a,t,g, or c

<220>  
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<222> (17)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (19)  
<223> n equals a,t,g, or c

<400> 322  
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actaccactt gccagcaaca aaaggaagag ctgctccctg cacaggatat caaagctctg 240  
tttgtgtctg aggaggagaa aaagctgact cggaaggagg tctacatcaa gaatggggat 300  
aagaaaggca gctgtgagag agatgctcaa tatgccccag gctatgacaa agtcaaggac 360  
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ccaataactt gcagagggtga ttctggcggc cccttgatag ttcacaagag aagtcgtttc 480  
attcaagttg gtgtaatcag ctggggagta gtggatgtct gcaaaaacca gaagcggcaa 540  
aagcagggtac ctgtcacgcc cgagactttc acatcaacct ctttcaagtg ctgccctggc 600  
tgaaggagaa actccaagat gaggatattg gttttctata aggggtttcc tgctggacag 660  
gggcgtggga ttgaattaaa acagctgcga caacaaaaaa aaaaaaaaaa aaaaaaaaaa 720  
aaaaaaaaag gggggggg 738

<210> 323  
<211> 876  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (61)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (759)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (761)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (786)  
<223> n equals a,t,g, or c



<220>  
<221> misc feature  
<222> (798)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (857)  
<223> n equals a,t,g, or c

<400> 323  
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ggctttgcaa attggcagcc caagtytcag gggcctgtgc agtgactgat cattaccaac 180  
atttcgaagt gagagatgtc acataaagag cgctatttcg agcttctctt gaaaagttgt 240  
aaggtgagct accctgggac tgtattcctg aatggcaatg tgatggcaga gtcctgcagt 300  
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ctctgtaacc ttccaatatc tttctccttc cagggtactgt aaaccactta gtaattaatt 480  
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tccagtggag gagtcagata tgactcacca cacagatcga aaaatctyca caaattatga 660  
gaagaatgct gagggaagaa agaacatagg tggaccgct gctgagtcca ggcttacttg 720  
cagagatcta tgctggccag gccctgtgct aggcagcana ngacatggaa taaaatcaaa 780  
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<210> 324  
<211> 1322  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (47)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1309)  
<223> n equals a,t,g, or c

<400> 324  
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agattatacc aaaatagaga aaattggaga aggtacctat ggagtttgtt ataagggtag 180  
acacaaaact acaggtcaag tggtagccat gaaaaaatc agactagaaa gtgaagagga 240  
aggggttcct agtactgcaa ttccgggaaat ttctctatta aaggaaacttc gtcattccaaa 300  
tatagtcagt cttcaggatg tgcttatgca ggattccagg ttatatctca tctttgagtt 360  
tctttccatg gatctgaaga aatacttgga ttctatccct cctggtcagt acatggattc 420  
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gaggtagtaa cactctggta cagatctcca gaagtattgc tggggtcagc tcgttactca 660
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ct
1322

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&lt;210&gt; 325

&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (64)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (71)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 325

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acccaggagc tctagtcttk gccctactc tccaactcac tccctcctc cactactcca 180
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tccatatgca ggttcctgca aagcttggtt atctgcagat ggaagcagcc aggactgaga 300
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342

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&lt;210&gt; 326

&lt;211&gt; 3690

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 326

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ctgggcgact cctcctcctc ctcttctcgc cattgcagtt ggaccagca gcccggcgcg 60
cacgcgtggc ttttgggggc agaccccggc gggctgtggc aggagggcgc cggcggcgcg 120
tgcggtcgaa gaaggggacg ccgacaagag ttgaagtatt gataacacca aggaactcta 180
tcacaatttg aaaagataag caaaagtttg atttccagac actacagaag aagtaaaaaat 240
gcgtccaatg cgaatttttg tgaatgatga ccgccatgtg atggcaaagc attcttccgt 300
ttatccaaca caagaggagc tggaggcagt ccagaacatg gtgttccac acggagcgcg 360

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agacggagca catgaccaga accctgcggg gagtgatgag ggtgggcctg gtggcaagg 540  
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ct 1322

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<210> 325

<211> 342

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (64)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (71)

<223> n equals a,t,g, or c

<400> 325

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tccatattgca ggttcctgca aagcttggtt atctgcagat ggaagcagcc aggactgaga 300
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<210> 326

<211> 3690

<212> DNA

<213> Homo sapiens

<400> 326

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tgcggtcgaa gaaggggacg ccgacaagag ttgaagtatt gataacacca aggaactcta 180
tcacaatttg aaaagataag caaaagttag atttcagac actacagaag aagtaaaaat 240
gcgtccaatg cgaatttttg tgaatgatga ccgccatgtg atggcaaagc attcttccgt 300
ttatccaaca caagaggagc tggaggcagt ccagaacatg gtgttccac acggagcggg 360

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cgctcaaaagc tgtgtccgac tggatagacg agcaggaaaa gggtagcagc gagcaggcag 420  
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<210> 327

<211> 719

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (446)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (701)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (709)

<223> n equals a,t,g, or c

<400> 327

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aacttgccaa gcccttaact ctacttcctc ttcagtctgt ggtactcctc ctaaccctaa 600
accctctatg ctcaggggct ggaactgggg aatggagtaa gtcaccttct gactgcttag 660
taaacattca aagaaaaaaa aaaaaaaaaa aaaaaaacct ngggggggnc cccgtaccc 719
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<210> 328

<211> 989

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (176)

<223> n equals a,t,g, or c

<220>

<221> misc feature  
<222> (943)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (968)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (982)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (984)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (986)  
<223> n equals a,t,g, or c

<400> 328  
gcgggtgcgsa ggctctgctc ggatcgaggt ctgcagcgca ttcgggagca tgagtgcctgc 60  
agtgactgca ggaagctgg caccgggcacc ggccgaccct gggaaagccg gggcccccg 120  
agttgcagct cccggagctc cggcggcggc tccaccggcg aaagagatcc cggagntcct 180  
agtggaacca cgcagccggc ggcgctatgt gcggggccgc tttttgggca agggcggctt 240  
tgccaagtgc ttcgagatct cggacgcgga caccaaggag gtgttcgcgg gcaagattgt 300  
gcctaagtct ctgctgctca agccgcacca gagggagaag atgtccatgg aaatatccat 360  
tcaccgcagc ctgccccacc agcacgtcgt aggatccac ggctttttcg aggacaacga 420  
cttcgtgttc gtggtgttg agctctgccg ccggaggtct ctctggagc tgcacaagag 480  
gaggaaagcc ctgactgagc ctgaggcccg atactacctc cggcaaattg tgcttggtcg 540  
ccagtacctg caccgaaacc gagttattca tcgagacctc aagctgggca accttttct 600  
gaatgaagat ctggaggtga aaatagggga ttttggtactg gcaaccaaag tcgaatatga 660  
cggggagagg aagaagacc tgtgtgggac tcctaattac atagctcccg aggtgctgag 720  
caagaaaggg cacagtttcg aggtggatgt gtggtccatt ggggtgatca tgtatacctt 780  
gttagtgggc aaaccacctt ttgagacttc ttgcctaaaa gagacctacc tccggatcaa 840  
gaagaatgaa tacagtattc ccaagcacat caaccccggtg gccgcctccc tcatccagaa 900  
gatgcttcag acagatccca mtgscgcgca accattaacg rgntgcttaa wgacctccga 960  
tcttttcgncc caaaaaaaaa angnnatt 989

<210> 329  
<211> 434  
<212> DNA  
<213> Homo sapiens

<400> 329  
ctccagacga atagctttcc agttcttctt acccagggct tagaaagtaa cgattttgaa 60  
atgctaaata aagtacttca aactaggaat gtaaaccctta taaagaagac tgtattaagg 120

atgcccctgc atactattat tccgttggtta caagagctta caaagagggtt acaaggacat 180  
cctaatagtg ctgtgctaata ggttcagtgg ctaaaatgtg tgtaaacagt tcatgcatca 240  
tacctgtcca cgttgcctga cctgggtaccc cagctgggga cactctacca gttaatggaa 300  
agcagagtca aaacttttca gaaactttca caccttcatg gaaagcttat tcttctaatt 360  
acacaagtaa cagcatcaga gaagacaaag ggagcaactt cccctggaca gaaggcaaag 420  
ttggtgtatg aagt 434

<210> 330  
<211> 696  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (643)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (657)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (685)  
<223> n equals a,t,g, or c

<400> 330  
aatcggcac gagccaccct ggacgaagcc acccccaccc tcaccaacca aagcccagacc 60  
ttaaccctgc agtccaccaa cacgcacacg cagagcagca gctccagctc tracggaggc 120  
ctcttccgct cccggcccgcc cactcgcctc ccgcctggcg aggacggctg tgttgagccc 180  
tatgtggact ttgctgagtt ttaccgcctc tggagcgtgg accatggcga gcagagcgtg 240  
gtgacagcac cgtaggcagc cggagaatgc agcccaagca gggcctggca tggggcagga 300  
caggggtccag ccttttccta acatctgcct gtgccacaac ggccagcagg tgccccatcc 360  
tctgcccaca gcaractctg tcccatggct ctccgggcag tagagtgtgt gagtgcagac 420  
tggacctgtg gttcatacct tgtcaccacc cgggaagctg aaggccactt yctcccagat 480  
ggcctcagca ggaccatcgm cctttctcag agcagagggc caggtataga aaccgcagtg 540  
ggcctgcaag ccgcccagags ctycccagca gcctcctaca gagcaggaag agggcgccct 600  
gttgaaccct gagtgtttgc aggcccagca gaccctgctg ttaccaagcg caccctngct 660  
ttcgaacatt aacttcctta acttngggac agtagg 696

<210> 331  
<211> 541  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (181)  
<223> n equals a,t,g, or c



<220>

<221> misc feature

<222> (532)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (541)

<223> n equals a,t,g, or c

<400> 331

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ccacgggtgtc ttctaccacc tggccaagag gctcacgggg atcacgtacc tccgtgtccg 60
cagcctgccc ggagaggacc tgaggggccc tkttagctac aggctgctgg gggtcattct 120
actgctgcac ctggtgctgt ccatggggct gcagctgtac ggtttcaggc agcggcasga 180
ngccaggaag gagtggaggc tgcaccgcgg cctgtytcac cgcaggcctc cttggaggag 240
agagccgttt ccagaaaccc cctgtgcamc ctgtgcctgg aggagcgag gcaccaaca 300
gccacgccct gcggccamct gttctgctgg gagtgcattc mcgctgggtg cagcagcaag 360
gcggagtgtc ccctcctgcc gggagaaagt tccctcccca gaaagctcat ctacctcgg 420
cactaccgct tgaaccggcg cccgggttgg gccttggaaca caaattgaac tctacgggaa 480
ttctgaaacg cccaagattt attctccagg atttaacctt gcttgccaaa antttaaac 540
n 541
```

<210> 332

<211> 305

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (54)

<223> n equals a,t,g, or c

<400> 332

```
ggnacggaaa agcgcgagaa gcggctcggt tcccaccacg gagaggcggg agtnagtcaa 60
ctgacaagcg ctggggacag tggcgctcct gtcttgccct tgctgctccc gccccgctct 120
tccctggctg ggctggcgga ggccttgctg atgaacctga ctgagggtcc cctggcgatg 180
gcagaaatgg accctacaca gggccgtgtg gtctttgagg acgtggccat atatttctcc 240
aggaggagtg ggggcacttg atgaggtcag agattgctgt accgtgatgt gatgcttgag 300
aattt 305
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<210> 333

<211> 445

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (409)

<223> n equals a,t,g, or c

<400> 333

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ggtttgccaa aaantgtttg tacctctggg ccatattgca gaaccctgcc cttctttgtt 60
gactgaggaa agctcgctcc ctgcccaggt ttttcattgt tgatcgaaat taacaccagg 120
tgggtgaatag agcccctset aagggttgctc aggataaatc atttattaaa taggtctgct 180
tatcaggagg ggcgtgaagg ctcccaaaag gaaatgctgg cacctgggcc cagaagccag 240
ggccttytaa ctcttggggg tgatttcttc agtgaagttg caccctacaa agggaatatg 300
gccmaagcgg gcacttcaac tggaaggctg rtatcaggcg rttagacagc catggcattt 360
ctggcggtta gtctgggaat gggttggtag aggaggtggg acttatatng agggacttac 420
cagttccccg tttggatttt ggatg                                     445
```

<210> 334

<211> 317

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (100)

<223> n equals a,t,g, or c

<400> 334

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gaaatcttgt ctgttggaga agcaattttt ttcaactttg taacagagac ttgacatttt 60
taaattttta aagatgatgg actagactca agtatttttn aggactgtcc caatcataag 120
tctgaaggat ttcagtgtt atcataacat ttgacataca gttggcactt ggtaggtact 180
gaatcaatga ataggagtta ttggttgcc attcagaggc ttgtgggagt tgatcatccc 240
attgcagaga gccagttggt gaatcagcaa ggtttccatt tatgctgctc ccctccaccc 300
agtcccctgg agggact                                     317
```

<210> 335

<211> 1524

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1440)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1441)

<223> n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1511)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1523)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 335

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tctcccgggc tgcaggaatt cggcacagaa ctgccgactc atcttttcaa aagcaaaacc 60
atctgtatta gccttgtagc ttctcaattt ggaagtggaa actttgaaat ctgttgaatt 120
actggaaatt ctcttgctag ttaaaaaaca ttccaagatt aatgacactg agttcttcta 180
ctggagagag ttggtttcta aatgcctagc cgagtattct tctcctgaat gttgcaaacc 240
agatcttaag aagttggttt ggatcgtttc aaggcgacac gcccagaacc tccacaacag 300
ctactatagt gttcctgagc tgccaacgat acctgagggg gggtgttttg atgaaagtga 360
aagtgaggac tcttgtagaag atatgagttg tggagaggag agtctcagca gctctcctcc 420
cagtgatcaa gagtgcacct tctttttcaa cttcaaagtg gcacaaacac tgtgctttcc 480
atcttagaaa tctgattgtt ctgtcagaat ttatatattac aggtttcaaa gcaataaatg 540
ggggaatagg tagtttcctg gtttagcccc catctagtca ggaattaata tactggaata 600
cctaccttct atttggtatt cagatcagat ctggcctatt ttcataattta tcctaagcca 660
tcaaatgggg tagtgcctct taaaccatta acagtacttt agacattggc actttatttt 720
tctcgtagat ctttagctac tttggggagg agggaagggt ctgatacctt caatttggtta 780
cttttcaaga tttttaaaaa taactagtgt agcttatctt aaacatttta taaaaccttc 840
agatgtcttt aagcagattg gaagtatgca agtgcttcct tagcagggac agtggaataat 900
ccttaatggg ttatcataga ttccaccctc ccccttctc agaagagtga gtatgctctt 960
aaatgtcaaa cacatttttg ttgttttggt ttttaaataga tcagtgtcta tttgatgtga 1020
tgcagatctt ataaatttgga gaattataat attgacattt ctgtgatttt tatatatgta 1080
atgtcttaat tgagatttct gttaaggcag aaataattag gctagggctc ttagttttca 1140
ttcctattgc ccaagtattg tcaaaactat gtattatttt aatgttactt taaaaatcca 1200
taatctgcta gttttgcatg tacttatatg aaaacagtgc agtaagttga aaactcagta 1260
tctatggaat tgataaatgg tgatctgggt kagatatatta tcgcatttct tatattaaaa 1320
aatgctgcmt gattacrttt awttccktgga aattwcaytt cmgaakaggg rttgtatatg 1380
gtgccaagat tgaatatgaa gaacccgagt gttgagatat agtttaagca atctgggtggn 1440
ntcagctaga tgggctatta cttgaatgag attgcaggat ttacttataa tgttactgaa 1500
cttaagctaa ntgtttactg ggna 1524
```

&lt;210&gt; 336

&lt;211&gt; 306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 336

```
atatatacgt ggcgtaaaaat gtacatgaaa taacaagtca ctactcaaaa agtacatttt 60
ttttctctc agagccttat tagcaattgg caatcttaaa atttcatctc ctaagcaggg 120
tccttatcag atattccttg acccccctat gttaagtgtc ttagccactc attgttaagc 180
caactgctaa aatcttagaa aaatatttca gccttctcct accccatccc ccacccccac 240
aagcttctag cttcttctac ctacagcaaa tggtaaaact ggtcagaagt tatattattt 300
actctg 306
```

<210> 337  
<211> 291  
<212> DNA  
<213> Homo sapiens

<400> 337  
atgcaaataa aatcaagtca tagttaaact tgcttatgtc aacgattctg ttcttgcaag 60  
acctacctgg cctcaagaga aattatatttc cagggcccaa cacattggtg ttttatcagc 120  
acctaattga cctggggaaa gcagaatgcc taactccagc ctgtggtatt ttgttatggc 180  
aggctgagca gactaataca gactttaata tacagactaa aagtaaaggg atggagaaaag 240  
atacccctag tcaaaataaa gaaagtagtt atgttaatct aagacagagc t 291

<210> 338  
<211> 1264  
<212> DNA  
<213> Homo sapiens

<400> 338  
ggcacgagtc gcgaccctgg tccggacctg acctgaattg cgaccccaac ctggactgct 60  
cccctgaccg caacccttac ccccgccac cagtatggcc cggcacgtgt tcctaacggg 120  
gccccagga gttggaaaaa caacattgat ccataaagcc agtgaggttt taaaatcctc 180  
tggtgtgcct gttgatggat tttataccga agaagtcaga caggagggga gaagaatagg 240  
attcgatgtc gtcacgttgt cccgcacccg ggggccttta tcgagagttg ggtagagcc 300  
tccacctgga aaacgtgaat gccgagttgg gcagtatgtg gtcgacctga cttcttttga 360  
gcagttggca ctaccctgtc tgaggaatgc cgactgcagc agtggcccag ggcaaagagt 420  
gtgcgtcatc gatgagattg ggaagatgga gctcttcagt cagcttttca ttcaagctgt 480  
tcgtcagacg ctgtctaccc cagggaactat aatccttggc acaatcccag ttcctaaagg 540  
aaagccactg gctctttaga aagaaatcag aaacagaaaag gatgtgaagg tgtttaatgt 600  
caccaaggaa aacagaaacc accttctgcc agatatcgtg acgtgcgtgc agagcagcag 660  
gaagtgaaga cacgtgcatt cctgccttcc gtgaaggagt gcccagttca agaggagcct 720  
gatggagccc tgctgtcga ggctgtatgc ctatgggggt atggaacctt gtgggctttt 780  
ctagagaaaa ctcaacagct gtttcccata aaatgtttta aagatcaaat tagccttaat 840  
gctggattgt ctgtacaaga ttaactatcc attgtggctt atctatgctt aaagatttct 900  
tgtttatttc ctcttgacgt catgcacatg atttgggtaa actgtgagat gagaaatgg 960  
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tattattcca aaagaaaacc attttaggtc atctcccca actctgtttg cttactgctt 1200  
aataaatata aaaataaatc tgatggttac agamarkaaa aaaaaaaaaa aaaaaaaaaa 1260  
aaaa 1264

<210> 339  
<211> 759  
<212> DNA  
<213> Homo sapiens

<400> 339  
ttcggcactg agggagccat ggcggtggca aattcaagtc ctgttaaccc cgtgggtgttc 60  
tttgatgtca gtattggcgg tcaggaagtt ggccgcagta agatcgagct ctttgagac 120  
gttgtgccta agacggccga gaactttagg cagttctgca ccggagaatt caggaaagat 180

gggggttccaa taggatacaa aggaagcacc ttccacaggg tcataaagga tttcatgatt 240  
cagggtggag attttgttaa tggagatggg actggagtcg ccagtattta ccgggggcca 300  
tttgcatgag aaaattttta acttagacac tcagctccag gcctgctttc catggcgaaac 360  
agtgggtccaa gtacaaaatgg ctgtcagttc tttatcacct gctctaagtg cgattggctg 420  
gatgggaagc atgtgggtgt tggaaaaatc atcgatggac ttctagtgat gagaaagatt 480  
gagaatgttc ccacaggccc caacaataag cccaagctac ctgtgggtgat ctcgcagtgt 540  
ggggagatgt agtccagaca aagactgaat caggccttcc cttcttcttg gtgggtgttct 600  
tgagtaagat aatctggact ggcccccgtc tttgcttccc tgccctgctgc tgccccattt 660  
gatcaagaga ccatggaagt gtcagagatt cagaatccaa gattgtcttt aagttttcaa 720  
ctgtaaataa agtttttttg tatgcgtaaa aaaaaaaaaa 759

<210> 340

<211> 2639

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (52)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1651)

<223> n equals a,t,g, or c

<400> 340

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tgttcttatt gatgactttg tggaatttgc acgcccctcaa attgctggga caaaaagtac 180  
aacagtgtag cactaaagga accttctaga atgtacatag tctgtacaat aaatacaaca 240  
gaaaattgca cagtcaattt ctgctggctg gactgaactg aagatcaatc ctcacaattc 300  
agactgaggg ttgagacaaa actttaagga tacatcttgg accatatcgt atttcattct 360  
tctaattggtg gtttgggctt gtcttctagt ctgggcccgt ctaaaccattt ataattccaa 420  
cattgtggat ttcattctat atctgtggac catcctagt tttctccca taagtcttag 480  
aagctttatg gtgattatgt tgaggttttc attctcgcat aaagcacaat gctgtcttca 540  
tcagaaaaca gttggcataa gaattaaaca tatgaacatc acaaaacaat ttataaaaac 600  
ttcttaaaata tacgcttttg gctagtgtgca aagactatgc taatagcact tccagtgaga 660  
gtgatataatt taagtgtact ggatctggaa tgggtgtttt gtttgggggg aatytTTTT 720  
tttcttgga aatcacatrt gttgttgatg tgagtatctg atgaaaaamc aatgtcagaa 780  
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cgcactatgg aacacaaaatg gaattctctt aatttataag aagatagttg cagttaaaatt 1200  
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gttggtaacta aacatttata attactgtgt aattataaac aaaaatacat aaagctttga 2340  
atataattat gtagcataaa agttaagggt gttcactatg atggcatctt agaattaaac 2400  
aaaactttta ctagggctga aaagagaaga ctgatttaat gtggtgtgat tattctgaag 2460  
ataaatgtct ggctacaggg aatattttgt actaaaaaat gattacacat atggctgtgt 2520  
gtgtttgagt ctgtgtctgt gagagagcca gagagagtga gagagattga cagagaaagg 2580  
gagagacaca cacacgcccc ttgaaacact taggagttaa agcaattcaa gggtcgagc 2639

<210> 341

<211> 1824

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1807)

<223> n equals a,t,g, or c

<400> 341

aaagggttac aagttgctgc caccttatct tagagttatt caaggggatg gagtagatat 60  
taatacctta caagaggtat gktttttata ttaaaagttt caataaggca tttcttataa 120  
ttaagtttgt ttatgtttga taaagaacac aatataaata caattttaag tctttgtaag 180  
tgtttatgtt ggtataaatc tctgtgcatt gcttaaagtt tagaaataat agtagtttaa 240  
aatacagagg tgccagccaa gccatactta ctcttccagt tgtcattggc caccctgaat 300  
gatgaatcta aagaagtatc attgtgaaca agggaaatgt cagtcaagaa atattccttg 360  
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<211> 4531

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (30)

<223> n equals a,t,g, or c

<400> 342

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<212> DNA  
<213> Homo sapiens

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<210> 344  
<211> 778  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (35)  
<223> n equals a,t,g, or c

<400> 344  
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<212> DNA  
<213> Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (223)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 345

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<211> 446

<212> DNA

<213> Homo sapiens

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<220>

<221> misc feature

<222> (408)

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<221> misc feature

<222> (427)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (442)

<223> n equals a,t,g, or c

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<211> 782  
<212> DNA  
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<222> (769)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (772)  
<223> n equals a,t,g, or c

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ta 782

<210> 348  
<211> 439  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (145)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (175)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

&lt;222&gt; (369)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (420)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 348

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&lt;210&gt; 349

&lt;211&gt; 2356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 349

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<210> 350

<211> 1219

<212> DNA

<213> Homo sapiens

<400> 350

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<210> 351

<211> 408

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (392)

<223> n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (397)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (405)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 351

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tgcatgggct agattttattg ktttttttagc ttcttcatct acaagcagag atggtaaacc 360
ttgcatatth ttgaaaagca tttgaagacc tnaaatnaac tggtnatg 408
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&lt;210&gt; 352

&lt;211&gt; 1283

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 352

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tcctggtata ctgtttcttg gctgacacta ctggtcaagt aagaaatttg taaataaatt 1260
tcttttggtt cttattatct aaa 1283
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&lt;210&gt; 353

&lt;211&gt; 3229



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 353

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<210> 354  
<211> 506  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (470)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (505)  
<223> n equals a,t,g, or c

<400> 354  
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gcgcgataac atccagggca tctaagacc agctatccgg cgccttgctc gtcgcggcgg 180  
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ctgagaagaa gtactgggca catgng 506

<210> 355  
<211> 742  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (80)  
<223> n equals a,t,g, or c

<400> 355  
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<210> 356

<211> 1695

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (24)

<223> n equals a,t,g, or c

<400> 356

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<210> 357

<211> 928

<212> DNA  
<213> Homo sapiens

<220>  
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<222> (928)  
<223> n equals a,t,g, or c

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<210> 358  
<211> 1374  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1360)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1374)  
<223> n equals a,t,g, or c

<400> 358  
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<210> 359

<211> 4152

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (65)

<223> n equals a,t,g, or c

<400> 359

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&lt;210&gt; 360

&lt;211&gt; 1156

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<220>

<221> misc feature

<222> (49)

<223> n equals a,t,g, or c

<400> 360

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ggaggactcc ctgcccagacc gggacctggc actcgccgat gagccagcag gaacgccgac 180
ctgtccatca cgctgggtac atcgctgcag atccggccca gcgggaacct gccgmtggct 240
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tgggctccag gggcctctgg tgcggttccg ggaagaagcc acaccccara ggtgacagct 840
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gaagtggggg atcagtagag gcttgcactg cctttggggc tggagggaga cgtgggtcca 1080
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aaaaaaaaaa aaaaaa                                     1156
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<210> 361

<211> 376

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (35)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (371)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (374)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (376)

<223> n equals a,t,g, or c

<400> 361

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waaaaytaga aagaagcttt ctgagaaact gctttgtgat rtgtgcattc atctcacaga 120
ggtaaattctt tcttttgatt cagcagtttg gaaacctggc taacatgggtg aacccgggtgt 180
ctactgaaaa tacaaaaaat tagccagggtg tgggtggcaca atgctgtaat cccagctact 240
caggaggctg aggcaggaga atcgcttgaa cccgggaggt gggagggttac agtgagccaa 300
gtttgtgccca ctgcattcca gcctgggctt atagagtggg acttccgtct tcaaaaaaaaa 360
aaaaaaaaaa nctngn 376
```

<210> 362

<211> 519

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (517)

<223> n equals a,t,g, or c

<400> 362

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gcatcttaag ttgccctct gactgggcag ctttctcctg aacacagtga ggaatgctaa 120
gttacatggt ccagtaamtg agtggatacc ctgagccccc gcatcccact ggctgctatg 180
cagggataag tccatgcacc tgtggatggc agtggttgag ctggttctct ataaaagtat 240
ccagtgccca gacctttgtt cacacatgca tgtaaattta ctgggaaaac tctagagacc 300
aatgttcttt cttccacaga aatctggcct agcagtctat tcttaaattg ctctttgtgt 360
gtaagacaca tctgtttgat accccactct gccctgactt ttaggcaaat ccgttaggac 420
aggaaccact attttctttc cttccctttg aatcatcttt taaagcagca gaggcaatgt 480
tkggcagagg tccacattgg gaaagttagt gcatcanga 519
```

<210> 363

<211> 1385

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1320)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1340)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1350)

<223> n equals a,t,g, or c



<220>

<221> misc feature

<222> (1360)

<223> n equals a,t,g, or c

<400> 363

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ttccttggtc cggggagtcc gcgcctccca cgccggacct ggaagagaaa agagcaaagc 180
ttgcagagggc tgcagagaga agacaaaaag aggctgcac tcggggaatt ttagatgttc 240
aatctgtgca agaaaagaga aagaaaaagg aaaaaataga aaaacaaatt gctacatccg 300
ggccccacc agaaggtgga cttaggtgga cagtttcata aagcataaca tgagtagaag 360
aatctactgc caataactgt ttattatctg caatcaagtg ggcttcatca atttaatttc 420
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tgcacgcgt tacatctgtt tttatttcac tatgaagatg tttgattaaa cttatggact 780
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<210> 364

<211> 977

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (25)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (962)

<223> n equals a,t,g, or c

&lt;400&gt; 364

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ttgggggaac actgtttttt ctgcatcatc ctgcatttgc tccccaagca atgtagaggt 180
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ngnaaaagga caaaaaa 977
```

&lt;210&gt; 365

&lt;211&gt; 964

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 365

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attttacctt taaaaaaatg tcattggcac cataaataag gactgtgaga gactgtttta 180
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ccgg 964
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&lt;210&gt; 366

&lt;211&gt; 1297

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 366

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ggagttcgag accagcctga ccaacatggc gaaacccgct ctctactaaa aatacaaaaa 120
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tccctgggta gagctagcat gccagcagct tctgcaggct ccaaaccag gccagaagcc 1080  
agaccaggc ctgctgcctg catctgcatt cctccttcc agtgttcctt agaacagaca 1140  
tttaggtatc tcaggtcctt tctaagtgtc cctttcctat gtatgcattt cctttttttg 1200  
tctttactat gcacttttagc ttataaagcc aattaaaaac gatgattgag aaaaaaaaaa 1260  
aaaaaagggc ggcgtcttta gaggatccaa agcttac 1297

<210> 367

<211> 785

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (704)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (746)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (753)

<223> n equals a,t,g, or c

<400> 367

gcggctggtt tcttggtgag cccgggtccc tcaaggccgg aaagaaagtc gggcttctct 60  
agcccttga ggactcgact cactggtgcg cgatttaggt ccggagaggc gttgtgaggt 120  
gagctttttc agaagcgcga tcccaggaca cgtcgggaag caagcatccc cagagctgct 180  
tggaagagg accaaagacg tctaaaaagt catttggaat tatctctaaa tatttgttac 240  
catgtataag ctgctaaaga gaaattgggc ccaacaaaac taattgaata attgaggcag 300  
atattgtgtg atcatcaaat tctatccaga agttgaagaa tctgaattta aagattgtgt 360  
gcatttaata agaggatgac ctttcagttt aatttcacta tagaagacca tctggaaaat 420  
gaattaacac ccattagaga tggagctttg accctggatt cctcaaaaaga gctgtcagtc 480  
tcagaaaagtc aaaaaggaga agagagggac agaaaatggt ctgcagaaca atttgacttg 540

```
cctcaggatc acttgtggga acataagtca atggaaaatg cagctccctc tcaagacaca 600
gacagtccac tcagtgcagc cagcagttca aggaacttgg gagccacatg ggaaaacagc 660
cctccttgag agctggccaa aggrgcmgtc tatgccttaa aggnntttaaa gaagrtgttt 720
aggaaaatwa aagtycttag gaaacnttta ccnggggttt ccmgyctgtt taagttwttc 780
rgtta 785
```

<210> 368  
<211> 920  
<212> DNA  
<213> Homo sapiens

<400> 368

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ggcagagctc atgccatcac agtatctgtt gcaaatraaa aggcactagc taagtgtgag 60
aagtacatgc tgacccacca ggaactagcc tccgatggg agattgaaac taaactaatt 120
aagggtgata ttataaaaac aaggggtggt ggacaatctg ttcagtttac tgatattgag 180
actttaaagc aagaatcacc aaatggtgtt ctgtggctgt ggagatgaga gcaggatccc 240
agctgggacc tggatatcag catcacgcac aaccaagcg caaaaagcca tgaactgaca 300
gtcccagtac tgaaagaaca ttttcatttg tgtggatgat ttctcgaaag ccatgccaga 360
agcagctctc caggtcatct tgtagaactc cagctttgtt gaaaatcacg gacctcagct 420
acatcataca ctgaccaga gcaaagcttt ccctatgggt ccaaagacaa ctagtattca 480
acaaaccttg tatagtgtat gttttgccat atttaatat aatagcagag gaagactcct 540
tttttcatca ctgtatgaat tttttataat gtttttttaa aatataattc atgtatactt 600
ataaaactaat tcacacaagt gtttgtctta gatgattaag gaagactata tctagatcat 660
gtctgatttt ttattgtgac ttctccagcc ctggtctgaa tttcttaagg ttttataaac 720
aaatgctgct atttattagc tgcaagaatg cactttagaa ctatttgaca attcagactt 780
tcaaaaataaa gatgtaaag actggccaat aataaccatt ttaggaagggt gttttgaatt 840
ctgtatgtat atattcactt tctgacattt agatatgcca aaagaattaa aatcaaaaagc 900
actaagaaat amaaaaaaaaa 920
```

<210> 369  
<211> 834  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (533)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (831)  
<223> n equals a,t,g, or c

<400> 369

```
cctagaacgc tttgcgtccc gacgcccgcg ggtcctcgcg gtgcgcaccg tttgcgactt 60
ggtacttgga aaaatggaca aggattgtga aatgaaacgc accacactgg acagcccttt 120
ggggaagctg gagctgtctg gttgtgagca ggggtctgcac gaaataaagc tcctgggcaa 180
ggggacgtct gcagctgatg ccgtggaggt cccagccccc gctgcggttc tcggagggtc 240
ggagcccctg atgcagtgc cagcctggct gaatgcctat ttccaccagc ccgaggctat 300
cgaagagttc cccgtgccgg ctcttcacca tcccgttttc cagcaagagt cgttcaccag 360
```

```
acaggtgtta  tggaagctgc  tgaaggttgt  gaaattcggg  gaagtgattt  cttaccagca  420
attagcagcc  ctggcaggca  accccaaagc  cgcgcgagca  gtgggaggag  caatgagagg  480
caatcctgtc  cccatcctca  tcccgtagca  cagagtgggc  tgcagcagcg  ganccgtggg  540
caactactcc  ggaggactgg  ccgtgaagga  atggcttctg  gcccatgaag  gccaccggtt  600
ggggaagcca  ggcttgggag  ggagctcagg  tctggcaggg  gcctggctca  agggagcggg  660
agctacctcg  ggctccccsc  ctgctggccg  aaactgagta  tgtgcagtag  gatggatggt  720
tgagcgacac  acacgtgtaa  cactgcctcg  gatgcggggc  gtggaggcac  cgctgtatta  780
aaggaagtgg  cagtgtcctg  ggaaaaaaaa  aaaaaaaaaa  aagaaaaaaaa  naaa          834
```

<210> 370

<211> 947

<212> DNA

<213> Homo sapiens

<400> 370

```
tggaataga  atagctggat  acactaatct  ctacaagggtg  tcaggcagga  gattcaccgt  60
tccccagtc  caggggcagg  agagaaatct  gtaaagggac  agatgcacca  tctttatttc  120
aaaagaaaa  gctccctcag  attgtgttac  taggagtctc  ttttgtgaca  ttactgasc  180
tttctcccca  atcttacctt  cctattggct  acttttttaa  taaaaataaa  catttttagg  240
taatatgaca  aaaatgagat  aaaatcttaa  aaacattgta  ctagtgtaca  gttactaaaa  300
tgtgcttact  acaaaacagt  aaaatatttc  actctgtaaa  tcatcactaa  gtagttattc  360
tgtcctgttg  attatgagcc  tccaaaaatg  tttaatgctt  gamggatggg  ttgggaggca  420
gggaatcctt  wtcttaaaac  ractktaatg  aggcataatg  tacatatcat  aaaacaccca  480
tktcaagtgt  acatytcagt  gatttttagt  acttccctca  gtggtgtagc  tgtarctatt  540
actcagttt  agawcatktt  tatcccccca  ataagatctt  catgctcwkt  tacagttaac  600
ctgtgcttac  cccagcaaca  ctaatctact  tctctataaa  ttgcctttct  ggcagtcaat  660
catggaatca  tcatagtggc  cgtggctctg  cttgtactag  aatgtttgag  gttgtcagca  720
gtacgtctgg  actgtcgata  tgcggggaac  ggtgtgtggc  cattgctgcg  ggcttacatg  780
gtcatctgtc  tacgactcgc  gtgctatgga  cgtgggtcaa  ccatcgggag  cgtctccgcg  840
tcgagttttg  cttgtgtagg  ggcactgggt  cagtttggtg  ggagaggccg  gtccccgggg  900
aaactctgga  gactttgcga  gagccgctct  agcgcctcct  ggtggct          947
```

<210> 371

<211> 2340

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (316)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2301)

<223> n equals a,t,g, or c

<400> 371

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ggcacagcag  gaactccagg  ttctgctggc  cgtggcatcc  tctctccarg  tctgctccct  60
taccggagct  asgataasgt  agcatgartg  acacctgaga  ttagaggctg  gggctcactg  120
caggctgtgg  agaggctcatg  ctggtccaca  ggaacacttg  gcagtgtctt  cgtagacccc  180
```

tcggtgatgt ggaatggaca ggtgcctcgc aagagagcaa gcacgttcat aacaaaacag 240  
caacacaaag acatgttaag catgtttatt tttttgcctg tttttgtttt tttacttgag 300  
ctgtggtcac agctgnccag gtacctaacg aagtcagttg ggtacagcag gacacgccac 360  
cattccaggg tagctggtac cgccagaaac aggagtgggt cttgtcctgt tgcaggcaca 420  
ctgcagtggg tttcctgcag ctctccaaca aacgcctgag tcacaggcca gagctgcctt 480  
gggtatgttg taagtccaaa acttcttctc tgggctacct atcttccttc atgaagcagg 540  
tgctcaggac ccggaagaat catctacctc ccagctttgt gagacagaac caagtaaaag 600  
gaaacatgct agaaaacgtg cctagagaag acacttcaac ctttgcctta tccaaccctt 660  
cttcagagaa aggtgtccca tggcccaaaa aagaactgcc aagttttggt gaggagtaac 720  
accctggcat gacattcctt ctctttcctg gccctcaacc acttccttcc tttggctctt 780  
aagacctagc aggttctgtg aactctcagg ccttggccag cactagttag gggaggtcag 840  
gtggtcaatg tcctggtgat tttatgagac tgccccactg agaaaactta cttacttcag 900  
gcatccagtg cccccacca gggttcaggc cctgtctaag gtgttgctta aagacaaaaa 960  
ggcaacatgt gcctcactgg tgggtgtgcca ctgttctcat gctgcctcct aagtgactcc 1020  
gattttcagc cctggtagaa taaggaagac agctgatgcc tccttagccc cttagcacat 1080  
gttcctaagg tgtgttgta agccaacctg aattctgcct ccctgttata gtccctgtct 1140  
ccccacaga gacctgtggg tgctcccagc agagttgaga ctggctccgt tgagttaatg 1200  
actagaatat agtgctttca ctacttgatt gttaacctgt tttcttctga tgccatcagt 1260  
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caaagagctg agtgagtcc ctgctctcca gaggaccaag aaatacctgt gtgacacaga 1380  
cccacttcag tgtgtacagc aaattctata gtgcttctga gccagcagg gctttacctg 1440  
cccctggaga gtttttagccg tcttgtgttt cttgtttact tcacaaccaa atttgtcccc 1500  
tcttctctct gttaagggag agaagtcact ttagctggat aatacctatg taacaaactg 1560  
agcagctgtt atttgggcaa aatcaaagga agaaagagac tatggtcttc tatttattgt 1620  
gggaaggaaa acagggtggg gcgggtgagt gaaaagggtg aaatccctgg taccttgcc 1680  
ggtggttaca cagtttaacc ataggccaat tttaggggcc tctgaagtat ctttctacaa 1740  
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ctttcagaaa acattagtgg ccgctgcccc agctacagag acggccgaaa tgctttcact 1860  
ccttagcttt gccaaactcca tctccaaaaa ctccagaa tacctccctt tccagttcta 1920  
ccaaatctgt acttgggagc agcctgctgg atccagaaca tgacaacaga gagctgcgtc 1980  
cacagggaac aaagccctga cctctctctc cacattacc ttacaaaaac aggccctccc 2040  
catgagagag ctacacggca ggggcagaca ctgtgagtat aagctacttt cctccctgga 2100  
gtgctctatg tgggcagaac atgctctcct tgctctcct ggaagggtgtc ttctctatgg 2160  
cctggctaga gctgcaaaaa agggacacac cccacttcgg taaaagaaaa tagggaaagg 2220  
ccataaacia agacagactt gtagttttatt ttgtattttt tttaaataaa tacactttac 2280  
attaaaaaaa aaaaaaaaaa ncgggagggg tggcctaaac caaaagttga agctaaacct 2340

<210> 372

<211> 1575

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (58)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1492)

<223> n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1548)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1556)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1559)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1565)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 372

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atggatttgt ggacatccta gagagtgact taaaggacct cgtcatgtac agcaagtncc 60
agcggctctt ccgctctccg tccatgccct gcagcgtgat ccggcccatc ctcaagaggc 120
tggagcggcc ccaggacagg gacacgcccg tgcagaataa gcggaggcgg aggtgacccc 180
tcctgaggag cagcaggagg ctgaggaacc taaagcccgc gtcctccgct caaaatcact 240
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ctctaaggcc ttcctcctac agacagtaga cggaaagcac caagacctca agtacatctc 360
accagaaacg atgggtggccc tattgacggg caagttcagc aacatcgtgg ataagtttgt 420
gattgtagac tgcagatacc cctatgaata tgaaggcggg cacatcaaga ctgcggtgaa 480
cttggccctg gaacgcgacg ccgagagctt cctactgaag agccccatyg cgccctgtag 540
cctggacaag agagtcatcc tcattttcca ctgtgaattc tcactctgagc gtggggccccg 600
catgtgccgt ttcacagagg aacgagaccg tgctgtcaac gactaccca gcctctacta 660
ccctgagatg tatatcctga aaggcggcta caaggagtgc ttccctcagc acccgaactt 720
ctgtgaaccc caggactacc ggcccatgaa ccacgaggcc ttcaaggatg agctaaagac 780
cttcgcctc aagactcgca gctgggctgg ggagcggagc cggcgggagc tctgtagccg 840
gctgcaggac cagtgagggg cctgcgccag tcctgtacc tcccttgcc ttcgaggcct 900
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ccatgggaaa gatggtgtgg gtgtcctgcc tgtctgcccc agcccagatt cccctgtgtc 1020
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tagttaagtt gggttaatac cagcttaaag gcagtatttt gtgtcctcca ggagcttctt 1140
gtttccttgt tagggttaac ccttcatctt cctgtgtcct gaaacgctcc tttgtgtgtg 1200
tgtcagctga ggctggggga gagccgtggt ccctgaggat gggtcagagc taaactcctt 1260
cctggcctga gagtcactc tctgcccgtg gtacttcccc ggccagggct gcccctaate 1320
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caccatacga gcacctccag cctgaacaga agctcttact ctttcctatt tcagtgttac 1440
ctgtgtgctt ggtctgtttg amtttamggc ccactctcag ggacamtctc cntwagrmk 1500
gttttaaggg ttcccctgkt caaatatcag ttaccattc ggtcccangt ttttgntgnc 1560
ccaanaaggg gaagg                                     1575
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&lt;210&gt; 373

<211> 1878  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1717)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1764)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1771)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1773)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1810)  
<223> n equals a,t,g, or c

<400> 373  
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tacgcatagc tgctaaattc atcactcatg cccccccagg ggaattttaat gaagtattca 180  
atgacgttcg gctactactt aataatgaca atctcctcag ggaaggggca gcacatgcat 240  
ttgcccagta taacatggat cagttcacgc ctgtgaagat agaaggatat gaagatcagg 300  
tcttaattac agagcacggt gacctgggta atagcagatt tttagatcca agaaacaaaa 360  
tttcctttaa atttgaccac ttacggaaaag aagcaagtga cccccagcca gaagaagcag 420  
atggaggtct gaagtcttgg agagaatcct gtgacagtgc tttaagagcc tatgtgaaag 480  
accattattc caacggcttc tgtactgttt atgctaaaaac tatcgatggg caacagacta 540  
ttattgcatg tattgaaagc caccagtttc agcctaaaaa cttctggaat ggtcgttggg 600  
gatcagagtg gaagttcacc atcacaccac ctacagccca ggtggttggc gtgcttaaga 660  
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atgcagaaaa tgagtatcag acagcaatta gtgaaaacta tcaaacaatg tcagatacca 840  
cattcaaggc cttgcgccgg cagcttccag ttaccgcgac caaaatcgac tggaacaaga 900  
tactcagcta caagattggc aaagaaatgc agaatgctta aaggctgaat gtaggattct 960  
tcagtatgtg gaaagacaag gattcaacgt gtggtcatat gataaataag tgatttataa 1020  
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ctggtgaacc tatagcgttg tcttgattct tttgtgttct ctgccttgta attttctgtt 1140  
actgctatat ctacgtgtaa atcttttttt cttttttttt tttttttttt ggttaattct 1200  
gccacattta atgttggtga gagagtgatc tatcctaattg acattttact gtttaaaaaa 1260



gtttcctagc catgaagccc tgctactgat ttagacaagg tattatgggc attactttgt 1320  
accctatccc ttccaagcac ttctgggtact tcagtcgttt ttactgatcc accaacacct 1380  
aaagaggcta tgctacagtc tctagctaaa tggaagacac attcatcctt ctccctctga 1440  
ctgctttgat catcatttat tgcatctcat aactaatttt ctaaagtttg gattgggact 1500  
tttcagggtcc tttttggagg gcaaagggaag tgccagcttc tctggggaac ttgtttttaa 1560  
atccaaagac ttgaaccaca ttccctgcac atgaacatgt ttgcttttat cccttctctc 1620  
attgtctcct tcccatctta gtaccattgt agttattaaa accatctggc aatttttttt 1680  
targaaaagg caatttttta accccyattt tattttnttt ttaaaacat tttcaaggaa 1740  
actggctgga ccgtactggg gggcnattggg nangaagggt aattaaaaaa ctttggaana 1800  
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<210> 374

<211> 846

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (703)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (747)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (786)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (797)

<223> n equals a,t,g, or c

<400> 374

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tctgggggaa gcttcgtgtg gacatcaagg cttacctggg ctcgcccata cagctgggtg 180  
cctgtctgtc ggagacgacg gtgttgccgg ccgtgctgcg gcacatcagc gtgctgggtg 240  
cctgcttcct gaccttcccc aagcagtgcc gcattgctgt caagagaatg gtggtcgtat 300  
ggagcactgg ggaggagtct ctgagggtgc tggctttcct ggtcctcagc agagtctgcc 360  
ggcacaagaa ggacactttc cttggccccg tcctcaagca aatgtacatc acgtatgtga 420  
ggaactgcaa gttcaacctg cctgggtgccc tccccctcat cagtttcatg cagtggacct 480  
tgacggagct gctggccctg gagccgggtg tggcctacca gcacgccttc ctctacatcc 540  
gccagctcgc catacacctg cgcaacgcca tgaccacccg caagaaggaa acataccagt 600  
ctgtgtacaa ctggcagtat gtgcactgcc tcttcctgtg gtgccgggtc ctgagcactg 660  
cgggccccag cgaagcctcc agcccttggg ctaacccctc tgncccaagt catcattggc 720  
tgtatcaagc tcattccccaw tgcccgnctc taaccgcgtg cgaatgcamt gcatccgtgg 780

cctgangsyg cttctynggg gaagcttcgg ggggsccttc atcccgggtgg ctggcctttc 840  
aatcct 846

<210> 375

<211> 657

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (618)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (634)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (646)

<223> n equals a,t,g, or c

<400> 375

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tgtgattgaa gaagtcggct ctgggctcca gtgcgggaat cacacacata cctcagaatg 120  
ccgggtctaa gttgtagatt ttatcaacac aaatttcctg aggtggaaga tgtagtgatg 180  
gtgaatgtca gatccattgc tgaaatgggg gcttatgtca gcttgctgga atacaacaac 240  
attgaaggca tgattcttct tagtgaatta tccagaaggc gtatccgttc tatcaacaaa 300  
ctcatccgaa ttggcaggaa tgagtgtgtg gttgtcatta ggggtggaca agaaaaagga 360  
tatattgatt tgtcaaaaag aagagtttct ccagaggaag caatcaaata tgaagacaaa 420  
ttcacaaaat ccaaaactgt ttatagcatt cttcgtcatg ttgctgaggt gttagaatac 480  
accaaggatg agcagctgga aagcctattc cagaggactg cctgggtctt tgatgacaag 540  
tmcaagarac ctggatatgg tgcctatgat gcatttaagc atgcagctya grmcccatct 600  
aattttggaa aggttaanat tggaatgaaa attnaacggg aaaggntca ttaataa 657

<210> 376

<211> 695

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (39)

<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (56)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (103)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (647)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (653)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (662)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (680)  
<223> n equals a,t,g, or c

<400> 376  
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gctttgggtg agcaataaat ctttttaatc acctgggtgc agncaggctg agtccacaaa 120  
gagagtcagc taaggagat aggggtctat gaaggggtgg ggctgtttta taagatttag 180  
gtaggtaaag gaaaattaca gtcaaagggg gggtgttctt tgggtgggcag gagtgggggt 240  
cacaaggtgc tcagtggggg agattttttg agccaagata agccaggaaa aggamtttca 300  
caagktaatg tcatcagtta aggcaaggac tggccatttw crcttctttt gtggtggaat 360  
gtcatcagtt aaggyrgggc agggcatwtt cacttctttt stgattcttc agttacttca 420  
ggccatctgg gcgtrtacgt gcawgtcata ggggatgcga tggcttggct tgggctcaga 480  
ggcctgacat tcccaaagag aatacgaagc taagtgaggg aagagatttt tttatgtttc 540  
attcctagtg ctgtgtgggc acttagcaaa taattttaga acaaataaat acactttgcc 600  
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cnccatggac agtaatgtan ggatttaaag gcagg 695

<210> 377  
<211> 3610  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature

&lt;222&gt; (29)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 377

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cgtgtggaga agcggcggca caagcgcggc ggcgggagac actcccggcc ccaccagact 120
caagccctca ctgcactctc gcggccttcg ttgctcgac agctccctgc ccaggctagg 180
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tacgacggcg ttgatatcgg tggtaacgac ggcctcagca ggcggggaag atgaaagtag 300
ccggatcgag ctgggagatg tgacaccaca caatatataa cagttgaaaa gattgaatca 360
ggtcatcttt ccagtcagct acaatgacaa gttctacaag gatgtgctgg aggttggcga 420
gctagcaaaa cttgcctatt tcaatgatat tgctgtaggt gcagtatgct gtaggggtga 480
tcattcacag aatcagaaga gactttacat catgacacta ggatgtctgg caccttaccg 540
aaggctagga ataggaacta aaatgttaaa tcatgtctta aacatctgtg aaaaagatgg 600
tacttttgac aacattttatc tgcatgtcca gatcagcaat gagtcggcaa ttgacttcta 660
caggaagttt ggcttttgaga ttattgagac aaagaagaac tactataaga ggatagagcc 720
cgcatatgct catgtgctgc agaaaaacct caaagttcct tctggtcaga atgcagatgt 780
gcaaaagaca gacaactgaa caaattacaa atgaactttc ttgcacttgc ttgtcgccaa 840
ataaaagaga ggccattga ttccctcccc accccaacac tttcttttta aagcttttct 900
ccctccttgt tcttgttttt ctttcttctt ttcttttct ctgagagttt taatactttc 960
aaggacttta aaaaaataat catgtttgaa ttgttttctc ttatttttgt gaggtggttt 1020
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atagacaagt tgagtgtgtt tgtggtactt tgggttttta aacactttgg gatactaata 1260
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aacctgaatt gtaaagtgtt gtaaagggtt aattgtccta catcaaactt agttaaataa 3000  
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tactcatcaa ttgaaaagtc ctccaaaaag agaactattg ggaaaccatg gtgtggtggt 3420  
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taagtttact tgggtgcagtt aagaattaaa cttgtcaatt ttaacattgc tgttacatct 3540  
gaaataaact tatgtgatgt tctggtaaaa aaaaaaaaaa aaaaccaaga ctagttctct 3600  
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<210> 378

<211> 223

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (68)

<223> n equals a,t,g, or c

<400> 378

gtaaaaccgt atactaaatt tgaaatagaa atataagcgt gaactcattt gtttgttctt 60  
ttaccgtnag acacattttc tacctcctgc ccagtagacag ttagacacat ccaagcacct 120  
agaagttggt ctccataatac attgaaaaac catgaattca taktgatggt ttcccaaagc 180  
ccaaaccaac ccaaccaaac atgttatttg gtcctccttg gaa 223

<210> 379

<211> 809

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (171)

<223> n equals a,t,g, or c

<400> 379

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gccgagcgcc ggcgttgggc agaagcacag caccctccgt aagggcaccg ngagagcccc 180  
gragtgcgtt ccggggcttt cggagcagcg gtgtgaggac cagcagagag aagagattcc 240  
atcttccaga ggttgccact gtctgcctcc ccacttgtcc ccatccacag tcattctttt 300  
tatatatata atgacacatt agttgtctag ttcttcatag ttaatgtggt ttaagtctga 360  
catcttttct tttgccatga aatttacacc ttagtgttat tctcactgaa aattgccttt 420  
gagtttgata aactcttata ccagtgatat tgactgtttt aaattaacag atttatcacc 480  
atttctgagc tgtgtagggc cttaattgaa aaagtatctt tgattatttt ttcacatttt 540

ggccacakgc cyataataat ggratattta cagtactttt tagtggagaa cttttttaag 600  
tagaattttca ataattaatg tttgatggag tttggaagtt accgtatttt gaagtatcgt 660  
ttaacattct tctctcaatg agttttcctt taaaatttgc agtgaatttg ttttcctgtt 720  
tatgcatgag aatttaggtc ttattaattg ggggaaatta atgttaaagt aataaataag 780  
cccttggtgc aaacggacgc gtgggtcga 809

<210> 380

<211> 2550

<212> DNA

<213> Homo sapiens

<400> 380

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tggtctcaag gacactgcat cgtcaaactg atcccctggc cgttggagga gcagttcatc 180  
cctaaagggg ttgaagccaa aagccgaagt agcaaaaatg agacgaaagg gcggggcagc 240  
ccaaaagaga agacgctgga ctgtggctcag attgtctggg ggctggcctt cagcccgtgg 300  
ccttccccac ccagcaggaa gctctgggca cgccaccacc cccaagtgcc cgatgtctct 360  
tgcttggttc ttgctacggg actcaacgat gggcagatca agatctggga ggtgcagaca 420  
gggtcctctg ttttgaatct ttccggccac caagatgtcg tgagagatct gagcttcaca 480  
cccagtggca gtttgatttt ggtctccgct tcacgggata agactcttcg catctgggac 540  
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tgttccatct ccccagactg cagcatgctg tgctctgcag ctggagagaa gtcggtcttt 660  
ctatggagca tgaggtccta cacgttaatt cggaagctag agggccatca aagcagtgtt 720  
gtctcttggt acttctcccc cgactctgcc ctgcttgta cggcttctta cgataccaat 780  
gtgattatgt gggaccctta caccggcgaa aggtgaggt cactccacca caccaggtt 840  
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atttatttgt attttctcaa cagatgttaa ggtacaactg tgtttttctc gattatctaa 2040  
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tggattaatc agctggtttc aactctactg cgaaacaaaa atagctcctt aaaagtactg 2220  
ttctccttca gtggcatgta gttatctaata caagacacct cattcaaaca aaacctgcct 2280  
taggaaaatt taatatattt taaattattt taaaagaaat acaacatctt attctttagc 2340

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ttttttaatc ggtgctttat ggaggccagt gtaacgttac atgactcgtt gagaaagttg 2400
aggaatttcc tctaccacct ttgttgcttg aagaaaaaca tgtcttttca aaatgagagg 2460
ctttcattga agaaaagaaa aaaacaacag ttaaaagctt ttggctctct gtttcatttt 2520
tttccattaa gaaaaaaaaa agtccccctt 2550
```

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<210> 381
<211> 1268
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (1259)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc feature
<222> (1262)
<223> n equals a,t,g, or c
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<400> 381
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agcttccttg agcagtgggc ccaggcctgg ccctccacac ttcattctct gacctttctc 120
tctcctcatt tcggtgcatg tcctttctgc agctgccttt cagcacaggt ggttccactg 180
ggggcagcta acgctgagtg acaaggatgg gaagccacag gtgcatttta ctcaagtctt 240
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atcagcctct cttactgtac tctccgggaa tgtaacctt tctattttca gcctgtgcca 360
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ccccagggcc accgcttctt tcttgatcct ctttccttaa cagtgaactg ggcttgagtc 480
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tccaggggtg tttccactag tccactactg cttctccttg tagctaata atcaatattc 660
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aggagaaggg aggttctaga agaggcagcc cttctttgtc ctctggggta aatgagcttg 1020
acctagagta aatggagaga ccaaagcct ctgattttta atttccataa aatgttagaa 1080
gtatatatat acatatatat atttctttta atttttgagt ctttgatatg tctaaaaatc 1140
cattccctct gccctgaagc ctgagtgaga cacatgaaga aaactgtgtt tcattttaaag 1200
atgttaatta aatgattgaa acttgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1260
anaaaaaa 1268
```

```
<210> 382
<211> 854
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc feature
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<222> (794)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (807)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (835)

<223> n equals a,t,g, or c

<400> 382

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gcggacgcgt ggcgacgcgc tgggtgctta tgaacatcca ggctccagcc tttccctga 60
gggtcctaata gactatgtct tcagtcactc tccactccac tctcagcaac aagtgcgagc 120
ccctatcccc atggtgcccg ttggtgggat ccagatggtt cactccatgc cgccagccct 180
ttccagttta catccttcac ccacattgcc cctgccaatg gagggctttg aggagaagaa 240
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gcagcaaggg aattttcttt caagcacagr gggaaagcaa agatccttcc ttcaggaaaa 780
gagtycagct tacnttggtc ttttgngtgg ctggggngat tttccttttc ccacnttttt 840
cccctttttt tttg                                     854
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<210> 383

<211> 1091

<212> DNA

<213> Homo sapiens

<400> 383

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cctctcatth tatcagatgt gatgactgaa gccaccaca aatatgacca ctctgaggct 180
acaggatcct caagctggga tatccaaaat tctttcagaa gagagaagct ggaacaaaaa 240
tccccagatt cgaagacact acaggaagat tcacctggag tgagacaaag ggtctatgag 300
tgccaggagt gtgaaaaatc cttccggcaa aaaggtagtc taacgttaca tgagagaatc 360
cacactggtc aaaagccttt tgagtgcacc cactgtggaa aaagcttcag ggccaaaggc 420
aatcttggtt cacatcaacg gatacacacg ggagagaagc cttatcagtg caaggagtgt 480
gggaaaagct tcagtcacac aggtagtctc gctgtccacg agagactcca cactggacag 540
aaacctacg agtgtgctat ttgtcagaga agcttcagga atcagagtaa ccttgctggt 600
```



```

cacaggagag ttcacagtgg tgagaagccc tatagatgtg atcagtgtgg aaaagccttc 660
agtcagaaaag gaagcttaat tgttcacatc agagtccaca caggcctgaa gccctatgcc 720
tgtacccagt gcaggaagag tttccacacc agggggaatt gtattctgca tggcaaaatc 780
cacacaggag agacacccta tctgtgcggc cagtgtggaa aaagcttcac ccagagaggg 840
agtctggctg tgcaccagcg aagctgctca cagaggctca ccctttgacc actttcctga 900
agagaagttc tctttatgaa ttaagagtac aaaatcctct gagatgaagc aacctatcca 960
gttctatgga atgaatggag aatctttcag aaagaccatc attgggtagg gcaaactgat 1020
ttttttcctt tcccccaaaa gagtatgaaa aataaatgtc ttgtttatta tcattaaaaa 1080
aaaaaaaaaa a 1091

```

<210> 384

<211> 1029

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1014)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1015)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1026)

<223> n equals a,t,g, or c

<400> 384

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ttggaaaagg tgctgtgcct gaggaacaat accattttta agcaagcctt ttctctctta 180
aggttttagaa cttcaggaga gaagcccac tattctgtag gtggaattct actaagtatc 240
agtcggccct acaagacaaa gcccacccac ggcattggaa agtacaagca cttaatataa 300
gcagaagagc ccaagaagaa gaagggaaaa gtggaagtga gagccattaa tttggggaca 360
gattatgaat atgggggtttt aaatattcat ctgactgcat atgatatgac cctggcagag 420
agttatgccc agtatgttca caacctctgc aactctctct ccattaaagt cgaggaaagt 480
tatgcaatgc caaccaaaac catagaagtg ttgcagttgc aggaccaagg cagcaaaatg 540
ctcctggact cagtgcctac caccatgag cgagtgggtc agatcagcgg tttgagtgtc 600
acgtttgcag aaattttctt ggaaataatc caaagcagtc ttctgaagg agtcagactg 660
tcagtgaagg agcacactga agaagacttc aagggacgat tcaaagctcg accagaactg 720
gaagaactgt tggccaagtt gaagtagcta ctgtagaccc tttcatgcc aagcagtggtca 780
tattgagtgc caaagagaag agcttactgg gtagttagag ttcacagga gacccaaccc 840
ttagatttca taagtacca ttcccatagc cagtaatgtc ctactcctc tgtggcttgg 900
ctgtacttgc catttcttac cacttaccta tgaggtaatg cttgttatct tccatctaata 960
aaaaatctgc tgcagatgtg taaaaaaaaa aaaaaaaaaa aaaaaagaaa aaannaaaaa 1020
aaaaanaag 1029

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<210> 385

<211> 583  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (551)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (574)  
<223> n equals a,t,g, or c

<400> 385  
ccccgggtcg acccacgcgt ccgcccacgc gtccgcrcgg ccgactcgca agatggcgcc 60  
gcagaaagac aggaagccca agagggtcaac ctggagggtt aatttggacc ttactcatcc 120  
agtagaagat ggaatttttg attctggaaa ttttgagcaa tttctacggg agaagggttaa 180  
agtcaatggc aaaactggaa atctcgggaa tgttggtcac attgaacgct tcaagaataa 240  
aatcacagtt gtttctgaga aacagttctc taaaagggtat ttgaaatacc ttaccaagaa 300  
ataccttaag aagaacaatc ttcgtgattg gcttcgagt gttgcatctg acaaggagac 360  
ctacgaactt cgttacttcc agattagtca agatgaagat gaatcagagt cggaggacta 420  
ggcaaaggct ccccttacag ggctttgctt attaataaaa taaatgaagt atacatgaga 480  
aataccaaga aattggcttt tagtttatca gtgaataaaa aatattatac tcttgaaaaa 540  
aaaaaaaaaa nggcggccgt tttaaagatc cttnaggggc caa 583

<210> 386  
<211> 2410  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (2167)  
<223> n equals a,t,g, or c

<400> 386  
tatacccacg cgtccgcgga cgcgtgggtc gctggggtca gcagtgaagc tgcggacctt 60  
cgcggagaac taccctatcc ctgaaccagg cccaaatgag gtcttgctga ggatgcattc 120  
tgttggaatc tgtggctcag atgtccacta ctgggagtat ggtcgaattg ggaattttat 180  
tgtgaaaaag cccatggtgc tgggacatga agcttcggga acagtcgaaa aagtgggac 240  
atcggtaaaag cacctaaaac caggtgatcg tgttgccatc gagcctggtg ctccccgaga 300  
aaatgatgaa ttctgcaaga tgggcccata caatctgtca ccttccatct tcttctgtgc 360  
cacgcccccc gatgacggga acctctgccg gttctataag cacaatgcag ccttttggtta 420  
caagcttcct gacaatgtca cctttgagga aggcgccctg atcgagccac tttctgtggg 480  
gatccatgcc tgcaggagag gcggagttac cctgggacac aaggctcctg tgtgtggagc 540  
tgggccaatc gggatggtca ctttgctcgt ggccaaagca atgggagcag ctcaagtagt 600  
ggtgactgat ctgtctgcta cccgattgtc caaagccaag gagattgggg ctgatttagt 660  
cctccagatc tccaaggaga gccctcagga aatcgccagg aaagtagaag gtcagctggg 720  
gtgcaagccg gaagtcacca tcgagtgcac gggggcagag gcctccatcc aggcgggcat 780  
ctacgccact cgctctggtg ggaccctcgt gcttggtggg ctgggctctg agatgaccac 840

```

cgtaccccta ctgcatgcag ccatccggga ggtggatata aagggcgtgt ttcgatactg 900
caacacgtgg ccagtggcga tttcgatgct tgcgtccaag tctgtgaatg taaaaccctt 960
cgtcacccat aggtttcttc tggagaaagc tctggaggcc tttgaaacat taaaaagg 1020
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tctggccctt gggtttctct gttccactgc tactgacca gaggggaatg agggctgagt 1440
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gccactcagg gtctgggatg aaggcttgtc agcacttcca gtttagaacg caatgtttct 1560
agagacatat tggctgtttg ttttgatgat aaaaggagaa taagaaaagg catcactttc 1620
ctggatccag gataattttt aaaccaatca aatgaaaaaa acaaacaaac aaaaaaggaa 1680
atgtcatgtg aggttaaacc agtttgcatt cccctaattg ggaaaaagta agaggactac 1740
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caagtgaagg accccctccc caacatgccc caccaccacc ctaagyaygg tcccttgtca 1860
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aactaggctc atactcaatt gatggttatt agacaattcc atttctttct gggtattata 2040
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tgatttctat gaacttgtct tattttaatg gtgggttttt tttctggtaa gattggacct 2160
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accttatctt attgcatgtg aagtagttag agctgttctg actggacgtt ccttggcggg 2280
gttggtgggg ggggatgtgt gtgaaaaata ttcggccgtt gggggttccg gccgctgcat 2340
ggcatcctac gcctcgtggg ggcccccttg agcgcgcggt ggcccgctct ctcggtccaa 2400
ggccgcgcgg                                     2410

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&lt;210&gt; 387

&lt;211&gt; 689

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 387

```

agtaggcaga gtttacaaag gtctaggatg acatctgggtg tattgactgt ggccagtctt 60
aaagctagtt tttgctatgt ggaacatgct gctctaattc agatttaaag agtttcttcc 120
tgttaattcg aagctcactg tgctcttctt ttccgaggga agaaggactg attaatgcat 180
ctaaatggat gcaataactga attacagggtc agaagatact gaagattact acacattact 240
gggatgtgat gaactatctt cggttgaaca aatcctggca gaatttaaag tcagagctct 300
ggaatgtcac ccagacaagc atcctgaaaa ccccaaagct gtggagactt ttcagaaact 360
gcagaaggca aaggagattc tgaccaatga agagagtcga gcccgctatg accactggcg 420
aaggagccag atgtcgtatg cattccagca gtgggaagct ttgaatgact cagtgaagac 480
ggtgggtttc tcgctgggtg cgacgtgaat ttgtgaagct caggatgccc atggattaga 540
ctcatgtagt agcttaaaga gtcattaggc gataggaggg agaaaaccaa gaagtttagca 600
gagtcgtgat ataattcagt gtccgtaaat cccatgaaga gaagctcatc agaataaagg 660
caatgaattt gtgcyaaaaa aaaaaaaaaa                                     689

```

&lt;210&gt; 388

&lt;211&gt; 798

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<220>

<221> misc feature

<222> (215)

<223> n equals a,t,g, or c

<400> 388

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gctcgtgccg aattcggcac gagtgtagcc gagtttttga ttctcaacat gtccgagact 60
gctcctgccg ctcccgtgc cgcgcctcct gcggagaagg cccctgtaaa gaagaaggcg 120
gccaaaaagg ctgggggtac gcctcgtaag gcktccggtc ccccggtgtc agagctcatc 180
accaaggctg tggccgcctc taaagagcgt aggangtttc tctggctgct ctgaaaaaag 240
cgttggctgc cgccggctat gatgtggaga aaaacaacag ccgtatcaaa cttgggtctca 300
agagcctggt gagcaagggc actctggtgc aaacgaaagg caccggtgct tctggctcct 360
ttaaactcaa caagaaggca gcctccgggg aagccaagcc caagggtaaa aaggcgggcg 420
gaaccaaacc taagaagcca gttggggcag ccaagaagcc caagaaggcg gctggcgggcg 480
caactccgaa gaagagcgt aagaaaacac cgaagaaagc gaagaaggcg ccgcggccac 540
tgtaaccaag aaagtggcta agagcccaaa gaaggccaag gttgcgaagc ccaagaaagc 600
tgccaaaagt gctgctaagg ctgtgaagcc caaggccgct aagcccaagg ttgtcaagcc 660
taagaagcgg cgcccaagaa gaaatagcga acgcctactt ctaaaaccca aaargctctt 720
ttcagagcca cactgatct caataaaaga gctggataat ttcttttaaa aaaaaaaaaa 780
aaaaaaaaaa aaaaaaaaaa                                     798
```

<210> 389

<211> 1691

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (436)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1575)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1630)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1636)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1651)

<223> n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1664)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 389

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atttgggcct tatatgtcaa gcccttttggg ttccgtctta ttttaggggt tgttatgggg 60
scttgggtgg tcggcctcac atgggaaggg gatgggtagt ggatgggggt tctgttgtat 120
cttgtgggcg ggtaattttg cttttgtttt tgttcacatt cttccccctc cacaagccaa 180
agtcgtttca tttggtttcc actgtgtgga ctgtgctgga gcttggcgcc tgccagaaaa 240
atttggggct aggcaagccc caggttgcag acatggtgaa gcagagaaac tgttcttctg 300
gttcctgcac aacctcagag gggcaaaaac cctcccagg aaggaggagg gtgttcagga 360
gccagacttt tggagagaag gcagctccca gcctgctggg tgaccgccat tctgctgtg 420
ttccccagct gggcanggct ggaagcctta cgtatgaagc atggagaagc agccattgtc 480
cccactatgg gcagaggggg gaccggctg gccccttggg tcagactgga gccaacaccg 540
ccagccaccc cctctggctg ctggcaatgc cacaggtgcc caagaagatg gaggatccct 600
gtgccaggag ccaacctggg sttcccagg gtcagtggc cagtgaagac agaagcgaga 660
gaataaagt cctctgtagg cctctgtcac ctttgggttg tgtttttcaa ttgttgacat 720
ttcagagggg accctccaga agcccagccg gcttccccca aggactcccc cttcgtctggg 780
agtggatttc cacacgtgcc tttgatttcg gacagattgg gcctcacagc caccgattca 840
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tctgctagat tgcagtacta atggtagtgg tttagtgtct tcatgttaat attatttgta 1260
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caagggggaa gggcctgcag cctccgctcc tcaaagtgtc gcaactgaacc agttccagtc 1560
actaattgcg ccaancaagg ccaggaagga attcaaaaaca tgttctggcc aagcacaaga 1620
acatccccan tgggantgga acacaatgct nccccaaaac ctgnctttcc tggccttccc 1680
caacaactgg g 1691
```

&lt;210&gt; 390

&lt;211&gt; 454

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (425)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (444)

&lt;223&gt; n equals a,t,g, or c

<220>

<221> misc feature

<222> (451)

<223> n equals a,t,g, or c

<400> 390

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gcgacggcgc tggcttgccc ggctgggaga gggcgtaagc aaaatgatgc ttcaacaccc 60
aggccaggtc tctgcctcgg aagtgagtg tcttgccatc gtcccctgcc tgtcccctcc 120
tggtgactg gtgtttgagg attttgctaa cctgacgccc tttgtcaagg aagagctgag 180
gtttgccatc cagaacaagc acctctgcca ccggatgtcc tctgcgctgg aatcagtcac 240
tgtcagcgac agacccctcg ggggtgtccat cacaaaagcc gaggtagccc ctgaagaaga 300
tgaaaggaaa aagaggcgac gagaaagaaa taagattgca gctgcaaagt gccgaaacaa 360
gaagaaggag aagacggatg cctgcagaaa gtgagtgcct tctaacctta cccttctctc 420
gctangcctg tctttaccaa cttnatgtgg ntat 454
```

<210> 391

<211> 807

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (527)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (586)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (735)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (805)

<223> n equals a,t,g, or c

<400> 391

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caagctctaa tacgactcac tatagggaaa gctggtagcg ctgcaggtag cggtccggaa 60
ttcccgggtc gacccacgcg tccgggcgga aaaccgaagt tggaagtgtc tcttagcagc 120
gcgcggagaa gaacggggag ccagcatcat ggcagaacag gatgtggaaa acgatctttt 180
ggattacgat gaagaggaag agccccaggc tcctcaagag agcacaccag ctcccctaa 240
gaaagacatc aagggatcct acgtttccat ccacagctct ggcttccggg actttctgct 300
gaagccggag ctctcgcggg ccatcggtga ctgtggcttt gagcatcctt ctgagggtcca 360
gcatgagtg atccccagg ccattctggg catggacgtc ctgtgccagg ccaagtccgg 420
gatgggcaag acagcgggtc tcgtgctggc caccctacag cagattgagc ctgtcaacgg 480
acaggtgacg gtcttggtca tgtgccacac gagggagctg gccttcnaga tcagcaagga 540
```

atatgagcgc ttttccaagt acatgcccag cgtcaagggtg rgtcyntcgg ccagactgga 600  
ccaggcgcca cttggkttct gmagctttgk tagcctcggc tctggcccar ccagcattta 660  
ccaagcttgg caagggcagc tgcctttgaa ggtttgagcgt ggtttttgct ccttaaaagc 720  
ctgattgaat tatgncatgg ctcccagggg cctgcgccag ttcccagcct ggggctgcct 780  
ttgaaatggg aaccccggga aggcncct 807

<210> 392

<211> 927

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (916)

<223> n equals a,t,g, or c

<400> 392

ctgcagcggg agctggatga ggccacggag agcaacgakg ccatgggagc gaggtgaacg 60  
cactcaagag caagctcagg cgaggaaacg agacctcttt cgttccttct agaaggtctg 120  
gaggacgtag agttattgaa aatgcagatg gttctgagga ggaaacggac actcgagacg 180  
cagacttcaa tggaaccaag gccagtgaat aagcaacttt ctacagtttt gcaccacggc 240  
aagaaaacca aaaacaaaaa caaacaacaa aaaaaaaccc aacaacaacc cagaacaaag 300  
caaaacccag cagactgtac ttagcattgt ctaaateccat tctcaaattc caaatatcac 360  
agacacccct cmcacaggaa acttcgcagt gatgcaccag gcgaggaaac gagacctctt 420  
tcgttccttc tagaaggctt ggaggacgta gaagttattg aaaatgcaga tggttctgag 480  
gaggaaacgg aactcagaga cgcagacttc aatggaacca aggccagtga ataagcaact 540  
ttctacagtt ttgcaccacg gcaagaaaac caaaaaccaa aacaaacaaa caaaaaaac 600  
ccaacaacaa ccagaacaa agcaaaaacc agcagactgt acttagcatt gtctaaatcc 660  
atttctcaaat tccaaatatc acagacaccc ctcacacaag gaatatataaa accaccaccc 720  
tccagcctgg gcaacgtagt aaaaacctca tctatacaag attttaaaaa taagctgggc 780  
gtggtggtac acacctgtgg tcccagctac tagggaggct gagccaggaa gaacgstyca 840  
gcccaggayt tcgrggctgc aatgagctat aattgcatca ttgcactcca gcctgggcaa 900  
cagagaccct gttttnaacc accacca 927

<210> 393

<211> 1023

<212> DNA

<213> Homo sapiens

<400> 393

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cgatgctaga gcaactcttg cccccccacc ccacggacgt gttgcagtga tatcagaatt 120  
ttgcgtgcgg tttacccgtg tttaacctct ttgcgtctcg cttctgaatc gtatccactt 180  
gagcatcact agactgatct attttaaacac tgggtgggggg cagcgaggac atgggttttaa 240  
actttaaaat gaaaatgtga aactaggaat gttgctgtga gaccccttgg acaaacagat 300  
ttttgcactg gggatagaac ttgagcaatt tctgtcttgg cctcgccact gacgtccctt 360  
ctttcctgtg gggacaggat ggacagattc ctgggtgaaag gggctcaagg gggccttttg 420  
aggaagcagg aggagcaaga gccaactgga gaagagccag ctgtgttggg aggagacaaa 480  
gaaagcacia ggaagaggcy caggagagag gcccaggga atggaggcca ctcagcaggc 540  
cctagctggc ggcacattcg ggctgagggc ctggactgca gttacacagt cctgtttggc 600  
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ataaagatgg ctgtgaccac atcgggggagc accgagatga tgaaagagaa ctggcccctg 720  
ggagccccat tgcctctgtc tccttcgggtg cctgcagaga ctttgtcttc cggcataagg 780  
attcccgtgg gaaaagcccc tccaggagggt tggcgggtggt caggctgccg ctggcccacg 840  
ggagcttact aatgatgaac caccgcacca acacgcactg gtaccacagt cttcccgtga 900  
gaaagaagggt tctggctcca cgggtgaatc tgacttttctg taaaattttg cttactaaaa 960  
aataaaaaaca tttttaacag ttaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1020  
aaa 1023

<210> 394  
<211> 822  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (550)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (788)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (813)  
<223> n equals a,t,g, or c

<400> 394  
aaaaatttta aacaaagaaa ggaaaaaaat tgacaataaa agtcactctt ctaattgaat 60  
attttttatat ttttatgaaa caaaagagca tttcttcagg tttctattgt atttttttta 120  
acattcttgc agagaaagca agatccaaat tgattttggg atattaaaag ttaacagaac 180  
actgaacaag gaaagaatgg catagatcta tctttacagt ctggagttaa ttcctgttaa 240  
ctcattttat ccattcctta cataatcttc tttcctgtta gtccagtttg atggtgtgaa 300  
tggtgaattt caggcccagt tgctaaattt tgtggcatct tcctctagtc cttcccacct 360  
ccagtcatca gcccactct gtcttgagga caggcaggag gtgggggaag agctgaatct 420  
ctttattttc cctggtagag acatcttcaa ggcatgaaat agcttaaaga gcagagtaga 480  
aatggaagag gctttgcaaa aggctagata actaacaaca cctgggttgg ggcggcggcc 540  
tcttctcttn cagctccctt agcttggtc cgtaagtggg tcacttgcca aatgctttag 600  
atgattgcct ctcaataatt gaaagggtgg ggtagttgta ttctaaatga tgtagaagg 660  
taaaaataat tacattatgc ttctattcta tcatctaaaa cmaatcatta aaactaattt 720  
ctagctaaat kgtttaattat aattatgctc agaatctatt aatgagctct gctggcttac 780  
gactgcngt taagagaaat ctttacaaga ccnaggcctg aa 822

<210> 395  
<211> 1702  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature



<222> (1694)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1696)

<223> n equals a,t,g, or c

<400> 395

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gcttcttttg tttctgatta tgttttctgc agagagacac gggctcaagg aacccaagag 60
agtggaagaa ctgcaaaaca agattgtaaa ttgtctcaaa gaccacgtga ctttcaacaa 120
tgggggggttg aaccgccccca attattttgts caaactgttg gggaagctcc cagaacttcg 180
taccctttgc acacaggggc tacagcgcac tttctacctg aaattggaag acttggtgcc 240
accgccagca ataattgaca aacttttcct ggacacttta cctttctaag acctcctccc 300
aagcacttca aaggaactgg aatgataatg gaaactgtca agagggggca agtcacatgg 360
gcagagatag ccgtgtgagc agtctcagct caagctgccc cccatttctg taaccctcct 420
agcccccttg atccctaag aaaacaamca aacaaacaaa aactgttgct atttcctaac 480
ctgcaggcag aacctgaaag ggcatttttg ctccggggca tcctggattt agaacatgga 540
ctacacacaa tacagtggta taaacttttt attctcagtt taaaaatcag tttgttggtc 600
agaagaaaga ttgctataak gtataatggg aaatgttttg ccatgcttgg ttgttgagct 660
tcagacaaat gtaacacaca cacacataca cacacacaga gacacatcct 720
aaggggaccc acaagtattg cccyttaaca agacttcaaa gttttctgct gtaaagaaag 780
ctgtaataata tagtaaaact aaatgttgcg tgggtggcat gagttgaaga aggcaaaggc 840
ttgtaaatatt acccaatgca gtttggtttt ttaaattatt ttgtgcctat ttatgaataa 900
atattacaaa ttctaaaaga taagtgtgtt tgcaaaaaaa araaaaawaaa tacataaaaa 960
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tgttgtctaa agctaaacaa aacttgcatg cagcagcttt tgactgtttc cagagtgtct 1320
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tgtatgacag ttagagatgc tgattttttt tctgataaat tctttctttg agaaagacaa 1560
ttttaatgtt tacaacaata aaccatgtaa atgaaaaaaa aaaaaaaaaa aaaaaaaaaa 1620
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1680
aaaaaaaaag gggngnccgt tt 1702
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<210> 396

<211> 858

<212> DNA

<213> Homo sapiens

<400> 396

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agttgtataa ctgaaaaagg acttttctac caggtatgac cttttaagtg aaaatctgaa 180
ttgttctaaa tggaaagaaa aaaagtgtgca atctgtgccc ttcattgggg acattcctct 240
aggactggtt tggggacggg tgggaatgac ccctaggcaa ggggatgaga ccgcaggagg 300
aatggcggg gaggaggcat tcttgaactg ctgaggatgg ggggtgtccc ctcagcggag 360
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gccaagggag gggagcagcc tagttggtct tggagagatg gggaaggctt tcagctgatt 420  
tgcagaagtt gcccattgtg gcccagcca tcagggtg cgtggacgt gcccctgccc 480  
actcacctgc ccgctgccc gcccgcgcgc atagcacttg cagacctgcc tgaacgcaca 540  
tgacatagca cttgccgac tgcgtgtgtc cagaagggtgc ccttggccga gcgccgaact 600  
cgctcgccct ctagatgtcc aagtgccacg tgaactatgc aatttaaagg gttgaccac 660  
actagacgaa actggactcg tacgactctt ttatatattt ttatacttga aatgaaatcc 720  
tttgcttctt ttttaagcga atgattgctt ttaatgtttg cactgattta gttgcatgat 780  
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<210> 397

<211> 1110

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (225)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (996)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1100)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1106)

<223> n equals a,t,g, or c

<400> 397

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cgctgctggt ggccgcctgc ctctgcctgg cggaggtggg catcaccttc tgggtcattc 180  
acagggtggc atacacagag attgactgga aggcctacat ggccnaggta gaaggcgtca 240  
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ctggtttcgt gtacatcttt atggggttgt actatgccac cagccgaggc actgacatcc 360  
gcatggccca gaacatcttt gctgtgctct acctggctac cttgctgctt gtcttcttga 420  
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tcctcacaca gtttggcttc cgtggggccc tcccaagct gggaatctgt gctggccttc 720  
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ttgacctgg ccgccagttt ctgttccact ggacagtga ctggcgcttc ctcccagagg 840  
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```

tgctgtttgc cctctgcagg tggcacagga caggggaaaag tatcttgctg ctgctgaggg 960
atccctccaa aaggaagggt ccaccccagc cccttnacac ccaaccagat cgtttytaac 1020
ccttttcaac tccaatttca ttgggsatct ggtttcagsc gkttccttcc attaacagtt 1080
tttaagggtt gggtattttt caaaanattg 1110

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<210> 398
<211> 864
<212> DNA
<213> Homo sapiens

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<220>
<221> misc feature
<222> (823)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (830)
<223> n equals a,t,g, or c

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<400> 398
gcggcacgtg gcgcgggtgc ggggcgtgga gtggcgtggc gtggagtggc gtggcgtggc 60
gggggtctcgc ggcgcgggcg cgcacccgga gctgtggacg gagagtgcct ccctctggcc 120
tcagtttcct catgtttgtag tagcggacat ggcccggacc ggccscgag accgccccgt 180
gcaacctcac cgccagcctg ggggcctcag cgactgggac gggaccaagg ggctcgggga 240
ttctccctgc ccccgccct ggtgcgtgac tgacctcct gttcccagag cccccagcgc 300
argccgggat gttcgtcctg gtggaaatgg tggacaccgt ccggatcccc ccttggcagt 360
ttgagaggaa gctcaacgac tccattgccg aggagctgaa caagaagttg gccaacaagg 420
tcgtgtacaa cgtgggactc tgcatttgct tgtttgatat caccaaactg gaggatgcct 480
atgtattccc tggggatggc gcatcacaca ccaaagtcca ttttcgctgc gtggtgtttc 540
atccattcct agatgagatt ctcatggga agatcaaagg ctgcagccca gaaggagtgc 600
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ccaagttcga cgaagcggag caggtgtggg tgtgggagta cgagacggag gaaggagcac 720
acgacctcta catggacacc ggcgaggaga tccgcttcg ggtggtggac gagagctttg 780
ttgacacgtc cccacargg ccagytcag cagatgccac cantttccan tgargagctg 840
ccaaagaagg aggtccgtt acac 864

```

```

<210> 399
<211> 271
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (251)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (263)
<223> n equals a,t,g, or c

```

<400> 399

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tggattttta taaggccaga catttacctc tggtaatctc ttgagccatg tgtttcattt 60
ttatgctcac agaataattt ggtgtaatgg ggcttatyya cccaaatttc agaactttaa 120
attcatgtat ctttttctac actgatgact atactcaaag catcttactt taattatata 180
aatgtatata ctgtctttct caactggggt ttcaagagag aattaagccc aaaataaaat 240
aatttggtg ngcttatttt ctncaattttt c 271
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<210> 400

<211> 925

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (54)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (364)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (635)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (844)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (900)

<223> n equals a,t,g, or c

<400> 400

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cgggacaggg ggtctcggcc gtcggcgta tggtttcgcy cgtgcagctc ccgcctgaga 120
tccagctggc tcagcgctg gcggggaatg agcaggtgac ccgggaccgg gcggtgagga 180
agctccggaa atacatcgte gccaggactc agcggggccgc agtggtttta cgcacgacga 240
gctgctgaag gtgtggaag gactgtttta ttgcatgtgg atgcaggaca agccactcct 300
ccaggaagaa ttaggaagga ctatttccca gctcgttcat gcttttcaga ccacggaggc 360
gcanacctgt tccttcaggc cttctggcag accatgaatc gcgagtggac gggcattgac 420
aggctgcgct ggataaattc tacatgctca tgcggatggt cctgaacgag tccttgaagg 480
ytctgaagat gcaaggctgg gaagaaagac agatcgagga gctgctagag ctgctgatga 540
ctgaratcct gcaccccgag agccaggccc ccaacgggtg gaagagccac ttcacgaga 600
tcttcctgga ggagctgacc aaagtgggcy ccgangsagc ttacggcaga ccagaacctg 660
gaagttcatc gacccttct gcagaatcgc tgcccggacc aaggattcct tggttttgaa 720
```

caacatcact cgaggcatct ttgagacgat tgtggagcag gccccgcttg ccattgaaga 780  
cctcctgaat gaactggaca cacaggatga ggaggtggcg tcggacagtg atgagtcctc 840  
tganggcggt gaacgttgag acgcgctgtc ccagaagagg tctgagaagc cgccccgagn 900  
ttccatctgc agggctgaac ctgag 925

<210> 401

<211> 1085

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (774)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1080)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1085)

<223> n equals a,t,g, or c

<400> 401

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cgaggaagag atctaattgg gtagggcggg ttagactag cctgccgagc cgcccgtgg 180  
cacctgcagc ctctggggcg cccgccgggc cccggcgaga aagttgttaa agggagcgag 240  
gtggttggtc ctgggggtccg aggcgcgcct ctcacgccct gcccaacaga agccgcagtc 300  
ccgtgggggtc tggagacgca gtttcctgtt aatgacaata aatccctgct cccctgcct 360  
cagacatcta cgcagcgaaa tcgagcctgg ccttgagggt ccacaccgcg aggggaagatg 420  
cgtgcgcca ttccagagcc taagcctgga gacctgattg aratttttcg ccctttctac 480  
agacactggg ccattctatgt tggcgatgga tatgtggttc atctggcccc tccaagttag 540  
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aaggaattgc tgtatgatgt ggccgggagt gacaagtacc aggtcaacaa caaacatgat 660  
gacaagtact cgccgctgcc ctgcagcaaa atcatccagc gggcggagga gctggtgggg 720  
caggaggtgc tctacaagct gaccagttag aactgcgagc actttgtgaa tganctgcgc 780  
tatggagtcg cccgcagtga ccaggtcaga gatgtcatca tcgctgcaag cgttgaggga 840  
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caataactga aaaagactgt cctgtcagcg atgactttat acatcaaggg ggtcttggtt 960  
tgctagagag tttgggggtt gggttggtgga tttcattgtg atttataata aggcttattt 1020  
tcacagaata aaataaagca aaacgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1080  
ggggn 1085

<210> 402

<211> 348

<212> DNA

<213> Homo sapiens

<220>  
<221> misc feature  
<222> (65)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (149)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (308)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (343)  
<223> n equals a,t,g, or c

<400> 402  
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aaggnaaaac ccttwaaggg tttggggaaa ttcccccccc ccggggggg gccctttgcc 120  
caaaggggaa aaattttccg ggggccaanc cggaaaggcc ccaaaaaagg ttccccccgg 180  
ggaaggaatc cccggttgga attgttaaaa ccaaaagggg aattttgaag gccggaaatt 240  
cgggttgccc cccaacttcc cccaacattc ccggggggac ttgggggctg gaacgatgcc 300  
ttgggagnc tgggcaagct tcgcaaggct gggttggtcag ctngcgca 348

<210> 403  
<211> 1470  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (4)  
<223> n equals a,t,g, or c

<400> 403  
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cgagtcgtgc gaggtgccc ttctcactca gcattatgga tccaagcctg ttgagagaaa 180  
gggagctgtt caaaaaacga gctctttcta ctctgtagt agaaaaacgt tcagcatctt 240  
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caggtcttaa acaaaattct gatcatagca atggatcatt taacttgaaa gctttgtcag 360  
gaagctctgg atataagttt ggtgttcttg ctaagattgt gaattacatg aagacacggc 420  
atcagcgagg agatacgcat cctctaacct tagatgaaat tttggatgaa acacaacatt 480  
tagatattgg actcaagcag aaacaatggc taatgactga ggcttttagtc aacaatccca 540  
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aggccctact taggtcttta gatcagcatg accagcgagg attaggagga attcttttag 660  
aagacataga agaagcactg cccaattccc agaaagctgt caaggctttg ggggaccaga 720

tactatattgt aaatcgtccc gataagaaga aaatactttt cttcaatgat aagagctgtc 780  
agttttctgt ggatgaagaa tttcagaaac tgtggaggag tgtcactgta gattccatgg 840  
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aaaaaaaaaa aaaaaaaaaa aggggagggg 1470

<210> 404

<211> 2487

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (78)

<223> n equals a,t,g, or c

<400> 404

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cccgcggcgg cgcggcgcca cctccgcctg ctgctccgac ccgctcccgg cccgcggcgg 180  
cggcaccagg gcgcccggct cagccttccc ggaggcctcg gcccggcctc atcgtgccgg 240  
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gagactaacc agaccccggt gcccatgctg tgtagcacag gatgtggctt ttatggaaat 360  
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agtggcagaa tgagcccaat ggggacagct agtggttcca acagtcctac ctcagattct 480  
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atgagcattt caagagagga caaaataact accccgaaaa cagaggtgtc agagccagtt 660  
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acagggtttg actgccgatg tggaaatttg ttttgtggac ttcaccgtta ctctgacaag 840  
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aaccatcaag ccaacaacag ggtcttgaga taacctttga agcttattgt actggcctgc 1620
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aataataaaa gccatgtaca gagggaaaaa aaaaaaaaaa aaaaaaaaac tcgagactag 2460
ttctctctct ctctctctcc tcgtgcc                                     2487

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&lt;210&gt; 405

&lt;211&gt; 1256

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1180)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 405

```

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ggttcgtagt tcggctctgg ggtcttttgt gtccgggtct ggcttggtt tgtgtccgcg 120
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gtccccgcc gccaccaaca gcaaggggcc cccggacttc tccagtgcg aagagcgca 480
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cctattgtgg gaacaaccag gaagctatat gagaaaaagc ttttgaaact gagggaaaca 720
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gaacacaaga aagtgaagtc cactagggat attgttccct tttctgaact tgggaactac 900
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&lt;210&gt; 406



<211> 771  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (200)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (205)  
<223> n equals a,t,g, or c

<400> 406  
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aagcccgaat ctccgtgaay tcaggaaaac ttttaaaagc agagtataatt ctgagcagtc 660  
taataagcaa caatggagca acgggtacct ggctgtacag aaatgaaagt gacaagggtcc 720  
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<210> 407  
<211> 2643  
<212> DNA  
<213> Homo sapiens

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tgcagacact ggaaggacat gcccaaaatg tgtcttggtc cagctttcat cctgagttgc 240  
caatcattat cacaggttca gaagatggaa cagtacgtat ttggcattca agcacctacc 300  
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tccagcaggc caacctaaaa gcaatgggag atgctgaaat taaagatggt gaaagattgc 540  
- cactggcagt aaaggatatg ggcagttgtg aaatataccc tcagactatt cagcacaatc 600  
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cattgagaaa caagagcttt ggatctgctc aggagtttgc atggggccac gattcttcag 720  
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gtttcctttc tcaataatga aaataggctt ctagttttag aaggctgagc cgaaactaca 2580  
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tgt 2643

<210> 408  
<211> 1646  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (55)  
<223> n equals a,t,g, or c

<400> 408  
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aacagcaggt gcggccatcg cccagcacat ggatgttgac aaagttgcct tcaccgggtc 180  
caccgaggtg ggccacctga tccagaaagc agctggcgat tccaacctca agagagtcac 240  
cctggagctg ggtggttaaga sccccagcat cgtgctggcc gatgctgaca tggagcatgc 300  
cgtggagcag tgccacgaag ccctgttctt caacatgggc cagtgtgtgt gtgctggctc 360  
ccggaccttc gtggaagaat ccatctacaa tgagtttctc gagagaaccg tggagaaagc 420  
aaagcagagg aaagtgggga acccctttga gctggacacc cagcaggggc ctcaggtgga 480  
caaggagcag tttgaacgag tcctaggcta catccagctt ggccagaagg agggcgcaaa 540  
actcctctgt ggcggagagc gtttcgggga gcgtgggttc ttcattcaagc ctactgtctt 600

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aaaaaaaaaa aaaaaaaaaa aaaaaa 1646
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<210> 409

<211> 876

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (146)

<223> n equals a,t,g, or c

<400> 409

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tcaatcccc gtcctcctac actttnctct gtgagaaaga tccacctaca acctcaggct 180
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cagactgccc agctcgccc acagccactc ctggagcccc taaagctcta gcccaaggct 300
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taagtccatc ccctgtttaa tcgatacggg ggctacccac tccacgttgc cttcttttca 480
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cctgaaaact cccccactct ggtgccaact tggacaacac tcttttatgc actctttttt 600
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ttccctgact attcctggag tacagctaca tctcattgct gcccttcttc ccaatccaaa 720
gcctcctttg tgctctctaa catccccaca atatcacccc ttaccacaag acctcccttc 780
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gagaaacatc gtccattctc tctccatacc accccc 876
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<210> 410

<211> 1850

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1848)

<223> n equals a,t,g, or c

<400> 410

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cgctatggat gatcgagagg atctggtgta ccaggcgaas ctggccgagc aggctgagcg 180
atacgacgaa atggtggagt caatgaagaa agtagcaggg atggatgtgg agctgacagt 240
tgaagaaaga aacctcctat ctgttgcata taagaatgtg attggagcta gaagagcctc 300
ctggagaata atcagcagca ttgaacagaa agaagaaaac aagggaggag aagacaagct 360
aaaaatgatt cggaatatc ggcaaattgg tgagactgag ctaaagttaa tctgttgatga 420
cattctggat gtactggaca aacacctcat tccagcagct aacactggcg agtccaaggt 480
tttctattat aaaatgaaag gggactacca caggtatctg gcagaatttg ccacaggaaa 540
cgacaggaag gaggtgcgga agaacagcct agtggcttat aaagctgcta gtgatattgc 600
aatgacagaa cttccacca cgcacctat tcgcttaggt cttgctctca atttttccgt 660
attctactac gaaattctta attcccttga ccgtgcctgc aggttggcaa aagcagcttt 720
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aaaaaaaaac amggggnggg cccggtacct attscccta aagggggngg 1850
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<210> 411

<211> 661

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (518)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (567)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (568)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (648)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (660)

<223> n equals a,t,g, or c

<400> 411

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gtccggtggt tgactctgag gatctgcccc tgaaacatct cccgagaaat gctccagcag 120
agcaaaatct tgtaaagtca ttcgcaaaaa cattgttaag aagtgccttg agctcttctc 180
tgagctggca gaagacaagg agaattacaa gaaattctat gaggcattct ctaaaaatct 240
caagcttgga atccacgaag actccactaa ccgccgccgc ctgtctgagc tgctgcgcta 300
tcatacctcc cagtctggag atgagatgac atctctgtca gagtatgttt ctcgcatgaa 360
ggagacacag aagtcctctt attacatcac tgggtgagagc aaagagcagg tggccaactc 420
agcttttgtg garcagatgc ggaaacgggg cttcsaagtg gtwtatatga mcgarcccat 480
tgacrartwc tgtgtgcagc arctcmagga atttgawngg aararmctgg tcycagttac 540
caaggaggtc tggarctgcc tgaggtnnag gagagaagaa gaagatggaa gagagcaagg 600
caagtttaga ccttgcagct ctgaagaatc ttagttaaag ttagaagngc atcccatagn 660
t 661
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<210> 412

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 412

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tctcagttca taggctatcc catcaccctt tatttggaag aggaacgaga gaaggaaatt 180
agtgatgatg aggagagga agagaaaggt gagaaagaag aggaagataa agatgatgaa 240
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aagaagaaaa ctaagaagat caaagagaaa tacattgatc aggaagaact aaacaagacc 360
aagcctatct ggaccagaaa ccctgatgac atcaccacaag aggagtatgg agaattctac 420
aagagcctca ctaatgactg ggaagaccac ttggcagtc aagcactttt tgtagaaggt 480
cagttggaat tcagggcatt gctattttatt cctcgtcggg ctccctttga cctttttgag 540
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aacaagaaga aaaagaacaa catcaaactc tatgtccgcc gtgtgttcat catggacagc 600
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gag 1263

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&lt;210&gt; 413

&lt;211&gt; 1337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 413

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aggcggtctg ggagattcag ccgtgaagca agtgagata gatggccttg tggattataa 180
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cccattcccc ccttttg 1337

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&lt;210&gt; 414

&lt;211&gt; 792

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

<222> (744)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (783)

<223> n equals a,t,g, or c

<400> 414

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aagctactaa ccagagccgg ctctttctcg agattttatt ccctcaaagt tgccccaaa 180
gttaaagcca cagctgcgcc tgcaggagca ccgccacaac ctcaggacct tgagtttacc 240
aagttaccaa atggcttggt gattgcttct ttggaaaact attctcctgt atcaagaatt 300
ggtttgttca ttaaagcagg cagtagatat gaggacttca gcaatttagg aaccacccat 360
ttgctgcgtc ttacatccag tctgacgaca aaaggagctt catctttcaa gataacccgt 420
ggaattgaag cagttggtgg caaattaagt gtgaccgcaa caagggaaaa catggcttat 480
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aaagctgtgg cctttcagaa tccgcagact catgtcattg aaaatttgca tgcagcagct 660
taccggaatg ccttggtctaa tcccttgkat tgtcctgact ataggattgg aaaagtgaca 720
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agnatcaata ga 792
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<210> 415

<211> 1342

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1036)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1038)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1099)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1181)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1224)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1246)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1255)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1338)  
<223> n equals a,t,g, or c

<400> 415  
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<212> DNA  
<213> Homo sapiens

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aaagaaaaga aaagaaagga aagaaaagaa aac 1113

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<210> 417

<211> 1174

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (7)

<223> n equals a,t,g, or c

<400> 417

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gctccagttc ctaggactgt acaagaaatc tggaaaactt gtattcttag gtttgataa 240
tgcaggcaaa accactcttc ttcacatgct caaagatgac agattgggccc aacatgttcc 300
aacactacat ccgacatcag aagagctaac aattgctgga atgaccttta caacttttga 360
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gattgtcttt ctggtggact gtgcagatca ttctcgctc gtggaatcca aagttgagct 480
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<210> 418  
<211> 673  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (213)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (506)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (586)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (618)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (661)  
<223> n equals a,t,g, or c

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tatgccttcc agactggttg caaamtctac ctcctccttg agtgcctcag tgggtggcgag 420  
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tggttgagat cacgctggcc ctgggncatc tccactccca gggcatcatc taccggggac 540  
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nngggcaacca ttg 673

<210> 419  
<211> 2178  
<212> DNA

<213> Homo sapiens

<400> 419

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gaaaaaaaaa aaaaaaaaaa 2178
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<210> 420

<211> 1884

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (56)

<223> n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (283)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 420

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tccccatggg ggggtgttctc tccagactcc gccaaactgtg aattgccttt gttaaccccg 120
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at ttgaaata agaaaaaaaa aaaa 1884
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&lt;210&gt; 421

&lt;211&gt; 622

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 421

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<221> misc feature  
 <222> (489)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (510)  
 <223> n equals a,t,g, or c

<400> 423

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<210> 424  
 <211> 3118  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (388)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (485)  
 <223> n equals a,t,g, or c

<400> 424

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<211> 1410

<212> DNA

<213> Homo sapiens

<400> 425

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ctaaatttta cctcatttat taatctggctc attaaggaaat atatttaata atattatgta 180  
attattcttt ttatgcatga tacacctaga aaaatgcctt ttgtttctat tgatggcttt 240  
gttggtttgga gctacttttg attacttatt gcagtttccc aatttagtct ttactttatc 300  
taactcacia agtaaaatta actgatcaca tggcaactac tgtattttaa tagttctgga 360  
aaaatgaaag tgcttttttg tgcttggtaa atgggtaatg cccttgattc cttgactgta 420

```

ggacatagct gatctaaagt actctgtcag ttttaccttc acccatgact gtcattagtt 480
gtcaaagtgt aaaaagtact tagctgtgag aaatccttgt atgtttttat tataagaggt 540
ataatcatcc tcaaagcctg tttttattac atgatgtgga ctgattattt tttctatcac 600
agtgttaaca gatggatttt attgtaaata caaagaaaac atattgatta ttgtagtatt 660
cttatgtcac ctggcctttt gcgtgagatt atttattatt tctagcaagg ctttcttcct 720
ttcttattgc ccagagactg actgatacat cttttgttat ttttacacat aaattaaaca 780
tagccttttt ggacaaattc actaaatatt aatgtataaa atgtaattga gtaaattttt 840
atcagaattt taaaaataaa agagccttaga ctcagtagaa ctcagtagaa gcttcactat 900
ttactccagc gtgtgtaaat tgtacttact ctattctcag agtatattta ctgtccttac 960
cattgattct ttccttttgc taattttttt tttgttaat ggtagctgcg acttttaggtg 1020
gggtatattt tcttctccta agagaataga cagtttttcc agattcatca tcattgactg 1080
tcaagaaagg acccttcagc aaggctgtac cctcaatgca gttgatggcc tgtcttcacg 1140
gatttacaga cttggcctga tgcccatgta aattcaagct ttggcctgtg gtaacaacca 1200
caagaagaca agcatctgtg gtgcggaggc aagcaggcta actaggagtt gacaagctaa 1260
gaaagtgaaa ctgttctttt ttagttaact gtcttctctt ggagctctgt tattttgagt 1320
ataatatttc cacgacactt agtaaatgca agctaaaatg taataataat aaattgtatt 1380
ggagaaacct aaaaaaaaaat ttttttaaaa 1410

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```

<210> 426
<211> 1422
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (328)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (479)
<223> n equals a,t,g, or c

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<400> 426
ctcaccttgg ccttggaatt aatgacttgg agaagacctg aatggggagg ggagagcagt 60
agaagcatga gcctttctga ctgtctacat gttcttgccc agttttaact tctagtcagt 120
gcgaatgatc gcaggagagc acagactgga ccctgctacg atctctcttg gagtggatca 180
gactgatgat caccaacaac caactcattc ccggataagg aagaagagag tgtcacctac 240
ttcagtgtgg tttcaaccct acttctgcat cttaaagaca ctgtatgggt tcagcagtag 300
tgccctgttt cattagtccc cctgatgnnt tcattcctca tctcatcttt ttcttagcag 360
cattcaatga atccttcatt ctagaacac tctatatctt tggttttcat grgaccattc 420
tcaccttgtt ttgtcctgtg acttttttga aaaaaacaaa aacaaaaaac ccttttttnc 480
tttttaaaatt ctggtaaaaa acacaatgaa aatttgctat cttaaccatg ttgaaatgtg 540
cagttagtaa agtacattca cattgtgggt caagccatca ctaccatcca tcactagaac 600
ccttttcatc ttgcagatct gaaactctac ccattaaacr acttcccac tccccatccc 660
cacagctcct agcaaccaac attctacttt ctctatcagt ttgactactc taggtacctc 720
atatgagtag aatcatacag catttatcct tctctgcctg gcttatttca cttgtataat 780
gtccycaagg ttcatctatg ttgtagcatg catcagaact tcctcccctt ttaaaggctg 840
gataatattt catgggatgt ttagatcaca ttctgtttat ccattcatcc atcagtgaac 900
acttggtgct cttccaactt tgggctgttg ggtgtcctgc cactgttgct cctagtgtc 960
aatctcgtrt attccctcct aatcaagtgt acaacgttgg acactgtgca ggatgatgcc 1020

```

acttcatctt ggatgctaatt ctgccatggt gacttctgat taaccccagg cccaggaatg 1080  
cctcaagatt tctactttac ttactgttgc ttgtgtaagc caagacaacc ttgatgttat 1140  
cataaacatg tacttaccta agtcctgtcc tttggcaaat tatgggctat gagacacagc 1200  
attcttgccct ttccctgagg ggtcaatttc agcgatccta cacattcctt ctgaagcact 1260  
tatgctcttt ctatatggta tgtaagctct cggctcgggg agtaacagtg cagagatcta 1320  
cctgtcttgt tgccacatgt ttctaaactt tccaataaat caccttctac tgacaaaaaa 1380  
aaaaaaaaaa aaactcgagg tcgacggtat cgataagctt ga 1422

<210> 427  
<211> 830  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (686)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (772)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (809)  
<223> n equals a,t,g, or c

<400> 427  
gggatcgacc cacgcgtccg cctagcgccg ctgggcctgc aggtctctgt cgagcagcgg 60  
acgccgggtct ctgttccgca gatgggggtt gttaaagttg ttaagaataa ggccactttt 120  
aagagatacc aagtgaatt tagaagacga cgagagggtg aaactgatta ttatgctcgg 180  
aaacgcttgg tgatacaaga taaaaataaa tacaacacac ccaaatacag gatgatagtt 240  
cgtgtgacaa acagagatat catttgctcag attgcttatg cccgtataga gggggatatg 300  
atagtctgcg cagcgtatgc acacgaactg ccaaaatatg gtgtgaagggt tggcctgaca 360  
aattatgctg cagcatattg tactggcctg ctgctggccc gcaggcttct caatagggtt 420  
ggcatggaca agatctatga aggccaagtg gaggtgactg gtgatgaata caatgtggaa 480  
agcattgatg gtcagccagg tgccttcacc tgctatttgg atgcaggcct tgccagaact 540  
accactggca ataaagtttt tgggtgccctg aarggagctg tggatggagg cttgkctatc 600  
cctyacagta ccaaacgatt ccctggktat gawtctgaaa gcaaggaatt taatgcagaa 660  
gtacatcgga agcacatyat gggccnagaa tgggtgcaga ttacatgcgc tacttaatgg 720  
gaagaagatg aagatgctta ccaggaacag gttctyttca atwccttaaa gnacagcgta 780  
acttcacagac catgatggga ggagatgtnt taagaaaagc ttaatgctgg 830

<210> 428  
<211> 1622  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature



<222> (76)

<223> n equals a,t,g, or c

<400> 428

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ggcagagctt ccagggctgs ccatayttgc catggccgac tcagtagtca ctaacttcaa 60
caaaaataaaa actgtngcaa tagtattcta ttaaagcttc tttaactgct taaacttgcg 120
gttttgacat ggtacctatc ctttcttccc ttttcaaaag attcgctata gagtctttct 180
ctacatgcca gtctccaaaa tggcgcgagc ggcacagaa ggtcagaggt gagtacgtg 240
gggtccccccg gttccggcgc ggttgaggcc ttcggtggtg aacgagtctc cagcaccatg 300
tctggtttgt ctggcccacc agcccggcgc ggcccttttc cgtagcgtt gctgcttttg 360
ttcctgctcg gccccagatt ggtccttgcc atctccttcc atctgcccac taactctcgc 420
aagtgcctcc gtgaggagat tcacaaggac ctgctagtga ctggcgcgta cgagatctcc 480
gaccagtctg ggggcgctgg cggcctgcgc agcacctcaa gatcacagat tctgctggcc 540
atattctcta ctccaaagag gatgcaacca aggggaaatt tgcctttacc actgaagatt 600
atgacatggt tgaagtgtgt tttgagagca agggaaacagg gcggatacct gaccaactcg 660
tgatcctaga catgaagcat ggagtggagg cgaaaaaatta cgaagagatt gcaaaagtgt 720
agaagctcaa accattagag gtagagctgc gacgcctaga agacctttca gaactctatt 780
ttaatgattt tgcctacatg aagaagagag aagaggagat gcgtgatacc aacgagtcaa 840
caaacactcg ggtcctatac ttcagcatct tttcaatgkt ctgkctcatt ggactagcta 900
cctggcaggt cttctacctg cgacgcttct tcaaggccaa gaaattgatt gagtaatgaa 960
tgaggcatat tctcctccca ccttgtagct cagccagcag aacatcgctg gcacgtgcct 1020
gccctaaggc atcctaccaa cagcaccatc aaggcacgtt ggagctttct tgccagaact 1080
gatctctttt ggtgtgggag gacatggggt accacctaca cccaacaagt caatgaggga 1140
cttcttttta atttggtagg attttgactg gttttgcaac aatagggtcta ttattagagg 1200
cacctatgac aaaaaatagg ggttacctag ataatgccaa agtcagcatt tgtcctgggt 1260
tcccttgtgt gatctgtttg gactatgttt tcttttcttc tcccacttgc tcagcagctt 1320
gggcttccat tctagtctct ttaccaagat ttttgtgtga ccatgttgac ttcatttgga 1380
ttgccctctt tcaatttcct tgtgaaaaca cccttaactt tctctttacc cttagctgaa 1440
atgtttacat agcttctggt gatattcttt catgatttta aatctcttaa aatgggtgat 1500
gatgtgacac ctcataaaaag tgagcttttg actgtagata actcttaaag aaaatgtcat 1560
tttagacaat taaaatattt gtgctcaact gcttggaata aaaaaaaaaa aaaaaaaaaa 1620
aa 1622
```

<210> 429

<211> 548

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (48)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (385)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (453)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (512)

<223> n equals a,t,g, or c

<400> 429

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ctatgctact tagatatttg tggcaaagca gaaagctttt tgactgtnaa ggcagaggtc 60
agcactgggg gaaacttgct ggtgggtctct cccacaacct tgcccagagt cctttccact 120
aaggaggtga agagaacaga gaaagagatt tccatttctg ctgccagagc tgggtatttg 180
ctgcctgatt ctctgtgttt cctgtttcac cgccaccctt tcaggagaga actacaccag 240
ttcatcatga gggtcagga agcaaaagct ctcagatgtg tccagggcgt tacttaagaa 300
atgagtatgc agattctgga aggggtgtgg aaaaggatgat cctttacccc caccaggaa 360
aacctgcatt gtgctagcat ggaanaatca tgggctttgg aattaaacc atttggtgga 420
attaaacca tttggtttca aatcccagtt atnacatctg ttaactttgc aaactcacia 480
aaattatttg aaattatctg agttttcatt tntcacctt ccagaatggg gataatgcct 540
cctgcatac 548
```

<210> 430

<211> 569

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (381)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (553)

<223> n equals a,t,g, or c

<400> 430

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cccccgccct cggccgcttc tgtgggagca agaagcccga gcccgctcctg gccacaggca 60
gccgcatgtt cctgcgcttc tactcagata actcgggtcca gcgaaagggc ttccaggcct 120
cccacgccac agagtgcggg ggccagggtac gggcagacgt gaagaccaag gacctttact 180
cccacgcccc gtttggcgac aacaactacc ctgggggtgt ggactgtgag tgggtcattg 240
tggctgagga aggctacggc gtggagctcg tgttcagac ctttgaggtg gaggaggaga 300
ccgactgcgg ctatgactac atggagctct tcgacggcta cgacagcaca gccccaggc 360
tggggcgcta ctgtggctca nggcctcctg aggaggtgta ctcggcggga gattctgctg 420
tragtcactc gataccat accaaaaaag gtttccacct gcgatacacc agcaccaagt 480
tccaggacac acttcacagc aggaaatgac cactggcttr acaagggccg ggactggamc 540
ctgktgccct tgnccgctaa actggataa 569
```

<210> 431

<211> 549

<212> DNA

<213> Homo sapiens

<220>  
<221> misc feature  
<222> (519)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (541)  
<223> n equals a,t,g, or c

<400> 431  
gccggaactt ttgtcgatag gaacgggttt gcacagttga gtgttgtcgg ccggcgtgaa 60  
ggagactagg gggccatcct cttcctttcg ccgtcgccgc cgcggagcgg agtcgagccg 120  
agctgatttg atcgaggagc gcggttaccg gacgggctgg gtctatggc gctccgcggg 180  
ccgctccgcc ggctgggtgct tttttatcag ggcaagctgt gttccatggc agggaaacttt 240  
tggcagagct cccactattt gcaatggatt ttggataaac aagatctgtt gaaggagcgc 300  
caaaaggatt taaagtttct ctcaaggaa gaattattgga agttacaaat attttttaca 360  
aatgttatcc aagcattagg tgaacatctt aaattaagac aacaagttat tgccactgct 420  
acggtatatt tcaagagatt ctatgccagg tattctctga aaagtataga tcctgtatta 480  
atggctccta catgtgtgtt tttggcatcc aaagtagang gaaaaaaaaat tttttttttt 540  
nggggggggg 549

<210> 432  
<211> 1221  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1160)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1183)  
<223> n equals a,t,g, or c

<400> 432  
cgcacttccc ctctgctggg cgcgcggtgg acggtctgaa agggagtgtt cgggtttcgc 60  
tggggcctcg cggctccaga gccagcatg gcttctctgc gagcctcttc cacggcaacc 120  
aaaactaaag caccgcacga cttagttgct ccggtcgtga agaaaccaca catctattat 180  
ggaagtattg aagagaagga gagggagcgt ctggccaaag gagagtctgg gattttgggg 240  
aaagacggac ttaaagcagg gatcgaagct ggaaatatta atataacctc tggagaagtg 300  
tttgaaattg aagagcatat cagcagcga caggcagaag tattggctga gtttgagaga 360  
aggaagcgag cccggcagat caatgtttcc acagatgact cagagggtcaa agcttgccct 420  
agagccttgg gggaacccat cacacttttt ggagagggtc ctgctgaaag aagagaaagg 480  
ttaagaaata tcctctcagt tgtcgggtact gatgccttga aaaagaccaa aaaggatgat 540  
gagaagtcta aaaagtccaa agaagagtat cagcaaacct ggtatcatga aggaccaa 600  
agcttgaagg tggcaagact atggattgct aattattcgt tgcccagggc aatgaaacgc 660  
ttggaagagg cccgactcca taaggagatt cctgagacaa caaggacctc ccagatgcaa 720  
gagctgcaca agtctctccg gtctttgaat aatttttgca gtcagattgg ggatgatcgg 780

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cctatctcct actgtcactt tagtcccaat tccaagatgc tggccacagc ttgttggagt 840
gggcttttgc agctctggtc tgttcctgat tgcaacctcc ttcacactct tcgagggcat 900
aacacaaatg taggagcaat tgtattccat cccaaatcca ctgtctcctt ggacccaaaa 960
gatgtcaacc tggcctcttg tgcggctgat ggctctgtga agctttggag tctcgacagg 1020
tgaatatcac tgttctgtgg ccatactgc catcactaaa gtagatgttt gattggttgg 1080
tccccaggac ctcaagtaaaa atctggcatt agggccatgc gcatgggctc acaccttaag 1140
ggctgaaggc aggagaattn gcttaaaccg ggggaaatgg gangttgtgg tgagccgaga 1200
ttgcacactg cactcccagc t 1221
```

<210> 433

<211> 1115

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (45)

<223> n equals a,t,g, or c

<400> 433

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ggcacacatc accaagccca gccaaatttt gttttttttt tgtanagatg gggtttcac 60
acgttkccca ggctgatctc gaacctctgg gctcaagcaa ttcactcgcc tcggcctccc 120
aaaatgctgg gattacaggc ctgagccact gcgcccagcc aggatttgaa ttattttaac 180
tcatccatgg gctgccctag aatgtcacaa atgaggggtg tttaatgcct ttcttatagc 240
tgctactgga acactattat gacctaat  atgagccatc cttactcatc tacaagtgct 300
gaagcaatgt tacatacttt tttgctaaac tcagattttt tagcctaatt tcttgtcctc 360
ctatccacct gcatccacac atggcctgca tggggctgcc ttccctgcag tgttctgcag 420
ccatgcttca gggatatagc gttggtggac agcctcaggt cttgggggca ctatagccac 480
taaacgaggt gtgaaaggct caagaggatg accagcaatt aattatcccc agaaagtgaa 540
ggaaaagaga cctttaggga tgttgctggg caagtcttga tttgaccgga gtcaaatcaa 600
tcttcaagca atcttggaa cctcaactgc agtaagcatt tcaaaatgca aacaaactgc 660
ttaacaactg acaagacacc agcccatacg ctgctcttcc aacagtgggt tctagctttg 720
aacaaaagtg ctaaacat  ccttgaatat attcttctc tttttgtcct catcactcaa 780
tactggtgct cttgtcacag gtagaacagc ttgtttcttt tccatctatt caagtgtgtt 840
tctaattcta aaatgctgat cttctctgga gtctatggta ggcaattatg gtcactggaa 900
tagtttgtct tgttttmaaa tattattggg gcatgtacaa cagcatccaa catatctgtc 960
ttgttcctag atatatagc ctgatttttag gccttttgtg cataccatta caatatgggtg 1020
gggtaagaca ttctacagta gcctgtgctg aactgatctc ttaaataaac ttgcttctgg 1080
ttaactaaaa aaaaaaaaaa agggcggygc ctcta 1115
```

<210> 434

<211> 1604

<212> DNA

<213> Homo sapiens

<400> 434

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ctgctgctac tctgtttctt tcctcacttt gctttccaag gtggtatgtg atccccagct 60
caggcctgtg cagacaggaa attctccctc gcagcaagta ggggaagtgg gttgtgggat 120
gtgacctcct tccagatata aggcagttag tgtaaacctg ccacctccag cctgatcca 180
ttctcaccta gcggctacag gaagctgtgt ctgttcgatt tgggtgggagg agatgtgcag 240
ggagctgtat cttgtcctcc gcttgtgaaa aactcaagga tgtggagaag agtagaccgt 300
```

```

ggaaccctgc tcttctgcag ccaagctgag gggcaggatg cgtgtgggac agtggttagag 360
aagcagggga tagactcata ggctgcaaca aagggtgactc tgtccctgga cactgcctcc 420
gtactttctc cttgcttcac tggccacagc atctccctcc agccctcgct atgtgcctct 480
gccatcttca cccatcatgg agcagagggtg aggagaggca gcctgggaat atggagacca 540
gtgaaggacc aggcctggag agcacagggt cctacctggg catccagcag aggagccct 600
aaaggccagg agcaccccaa gaggaggagg ggcagccagc ctccattgac ggcgagcctc 660
cagccctctc ctactttgat caccatttct ctccaggctt tctgcctccg agatgtggca 720
ccatagtgcg gtgccctgtg gcttcaccgc cctacttcca cctccgcccc gcctgtaatg 780
tttatataag cagcctcaag gaccaagaac catctgcgaa aggacacaca caggaaattc 840
ataaaagaaa tctgaatgga taaaaccatg aaaaaaagta tgcttcatta gtaattaaag 900
aaaggcaaat agagctggaa gcatttttcc cttagcaaac cataacagaa aaaaataaga 960
cccaatattg gcaaagagac tactgaaaaa acattcccat acattgcgtg tgggagtata 1020
catcgggtgca ggcttcctgg atgacagttg ggtgatatgt gtcattgtggc ctaaaagcct 1080
ccatgtcatt tgacctacga attctatctt tgggaattta tcctaagaaa atacttaagg 1140
atntagttag tgataagatg ttcattccag cattgcaatg gagaaaaatg ggaagcaatg 1200
gtttggttgg gaattttatt cttttctgct gtaacgaaag tttgcaatag gggattgctt 1260
aagtaaatga ttgtatctcc atccagatgg tggagtaccg cgcagacatt aaaagtcatt 1320
taaaagaaca tctgactgaa agaaaaatgc tccttgaata ttaaaagggt gtaaaaatag 1380
tgcatgttat gtgatttcaa ttttgttttt taaaatatgg gtgtatgctt gtatacgtag 1440
agcagataaa aaagacggaa ggcatactaa aaaatgttga gtggttatct ttgtatgggt 1500
gaacaaagtc actgtaattt tcatctttgg tttttctgta atttccaaat tttccacatt 1560
ttgtatttca tataataaat ataatttaag aaaaaaaaaa aaaa 1604

```

&lt;210&gt; 435

&lt;211&gt; 301

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (274)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (277)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 435

```

gaggcggtga acgagcagct ttctagcgag cgcagcaacc tggcccaggt gatccgccag 60
gagttcgagg accggctggc agcctctgag gaggagacgc ggcaggccaa ggccgagctg 120
gccacgctgc aggcccgcca gcagctggag ctggaggagg tgcaccggag ggtgaagaca 180
gccctcgcga ggaaggagga ggccgtgagc agcctccgga cacaacatga ggtgagtccc 240
tgtggccagc cctgctggac ctcggggctg ggancangcc tgaccctgtg ggtgtgctgc 300
a

```

301

&lt;210&gt; 436

&lt;211&gt; 318

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<220>

<221> misc feature

<222> (242)

<223> n equals a,t,g, or c

<400> 436

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aattcggcac gaggaaccc ttagtcctgg ccatttcaaa agcatcacac agaagaagac 60
cttgatatatt acatttaagt cacatatgca gctactgaca cttactagtg ctggttatagt 120
cctggctatt attccatgag gtcgtcacat tttaaccttt tgcataagcc tccaacggcc 180
tgatggaatg atgaagcctc agaacagttt ctacacaatg gctaagggat gtacccattt 240
tnaattttcc tcttttctgt gatcacagag ggtgaatag ctttggccgg atacacagaa 300
gtgaaaactg tcacccat                                     318
```

<210> 437

<211> 1882

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1793)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1795)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1818)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1826)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1844)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1855)

<223> n equals a,t,g, or c

<400> 437

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tagcccgtcg ggagcgccag gccggccagg cctgcgccgy cgccgccgcc gccgtgccg 60
ccgcgccgac catgtcgmag ccaaggagaa cccgtgcagg aaattccagg ccaacatctt 120
```

caacaagagc aagtgtcaga actgcttcaa gccccgcgag tcgcatctgc tcaacgacga 180  
ggacctgacg caggcaaaac ccatttatgg cggttggctg ctccctggctc cagatgggac 240  
cgactttgac aaccacagtgc accggtctcg gaaatggcag cgacggttct tcattccttta 300  
cgagcacggs ctcttgctgt acgcccctgga tgagatgccc acgacccttc ctcagggcac 360  
catcaacatg aaccagtgc cagatgtggt ggatggggag ggccgcacgg gccagaagt 420  
ctccctgtgt attctgacgc ctgagaagga gcatttcac cgggcggaga ccaaggagat 480  
cgtcartggg tggctggaga tgctcatggt ctatccccgg accaacaagc agaatcagaa 540  
gaagaaacgg aaagtggagc cccccacacc acaggagcct gggcctgcca agtggctgtt 600  
accagcagca gcagcagcag cagcagcagc agcagcatcc ccagtgtga gaaagtcctc 660  
accaccaagt ccacactctg gcaggaagaa atgaggacca aggaccagcc agatggcagc 720  
agctgagtcc agctcagagt cccagccaga gccagcctcc tgctgccagc ytctgcggga 780  
actgggctag agagcaaaga agaggagagc gccatgagta gcgaccgcat ggactgtggc 840  
cgcaaagtcc ggggtggagag cggctacttc tctctggaga agaccaaaca ggacttgaag 900  
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gcctcggtt cccccctgtc tccacaccga agagccaagt cactggacag gaggtccacg 1200  
gagccctccg tgacgcccga cctgctgaat ttcaagaaag gctggctgac taagcagtat 1260  
gaggacggcc agtgaagaa aacttggtt gtccctcgccg atcaaagcct gagatactac 1320  
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ggcgagtta ccctgtcggc catgacatct gggattcggc ggaactggat ccagaccatc 1500  
atgaagcacg tgcaccgac cactgccccg gatgtgacca gctcgttgcc agaggaaaaa 1560  
aacaagagca gctgctcttt ttgagacctg cccgaggcct actgagaagc aagaggcaga 1620  
gctgggggag ccggaccctg agcagaagag gagccgcgca cgggagcgga ggcagagggc 1680  
cgctccaaga cctttgactg ggctgagttc cgtcccatcc agcaggccct ggctcaggag 1740  
cgggtgggag gcgtggggcc tgctgacacc cagagcccc tgccgcttga gngnasetg 1800  
gggaagctgg agcgggancg tgcacngaag cgggaggagc gccncaagcg cttcnggatg 1860  
ctcgacgcca cagaacgggc ca 1882

<210> 438

<211> 2056

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2046)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2053)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2054)

<223> n equals a,t,g, or c

&lt;400&gt; 438

```

gattcagctt aaccctgat cttcttaagt taaagggtact tttgttttat aaaagctcta 60
gataaaactt tcttttctga tcatgaatca agtatctgtg gtttcatgcc cctctctata 120
cctttcaaaag aactcctgaa gcaacttaac tcatcatttc agcctctgag tagaggtaaa 180
acctatgtgt acttctgttt atgatccata ttgatattta tgacatgaac acagaatagt 240
accttacatt tgctaaacag acagttaata tcaaatcctt tcaatattct gggaaccag 300
ggaagttttt aaaaatgtca ttactttcaa aggaacagaa gtagttaacc aaactaaca 360
gcaaaacctg aggtttacct agtgacacca aattatcggg attttaactg aatttacc 420
ttgactaaga atgaaccaga tttggtgggt gttttgtttc tatgcaaact ggacacaaat 480
tacaacagta aattttttta taagtgttc tcccttctcc atgatgtgac ttccggagat 540
aaaggattca aaagataaag acaaagtacg ctcataggtg ttaaccagaa agtcctggct 600
gtggttgagc aaacactgtt ggaagaaaag agatgactaa gtcaagtgtc tgccttatca 660
aaagagcaaa aatgcctctg gttttgtgtt tgggagaaaa atatcttgga cgcactgttt 720
tccttgataa agtcatctt ctctactgtg tgaaatgaat acttggaatt ctaattgttt 780
tgtgtgccag gggcagtaat gtccctgcct cttctcccaa tcaaggtga ggagtggggc 840
tggggagagg acttaactga cttagaagt agggaaaaca aaaacctctc tcctcagcct 900
tcacctcca agagaggagg aaaaacagtt gtctgtgtc tgaattcag tttgctgtga 960
ttttatgctc atgcaccaac ccatacagag taaatctttt atcaactata tactgggtgt 1020
taatagagaa tgattgtctt ccgagttttt tggttccttt ttaactgtg ttaaagtact 1080
tgaaatgtat tgactgtctga ctatatttta aaaacaaaat gaaataattt gagggtgtatt 1140
acagaggttg acattgttca gggatgggac aaagccttct tcaatccttt tcatactact 1200
taatgatttt ggtgcaggaa cctgagattt tctgatttat atttcatgat atttcacatt 1260
tgctcttcac agcatgagca tgaagccag tggcaccaaa tggctgggta caatcaagt 1320
atattttgta gcacctcact atctgaaagg ccagtgattt tcagatgatt tcattgagct 1380
tcattgcagc ctgaaatttt aaaaaagttg tgtaatacgc caaccagtca agttgtgttt 1440
tggccagaga tttagatatg tccaatttcc tggctcattt cattgtgtc tatgggtacg 1500
tataaaaagc aagaattctg tttcctaggc aaacattgca actcagggt aaagtcaccc 1560
agtgaactt ttagagccag aagtaacttt gtcccagtc tacaatgtga aaagagtga 1620
tagttgcctc ttttttagcca ttttcatggc tgggtacatat tcgtacgcat tacttttcag 1680
aatcaatacg cactttcaga tattcttatt tttattctct taagtcttta ttaactttgg 1740
agagagaaat gatgcattt tttattttta atgaagtaga tcaacatggg ggaacaaaat 1800
gataaagaac agaaaacatt tcaatatatt actaataact ttttccaata taaatcctaa 1860
aattcctata acatagtatt ttacagtttt atgaagcttt ctattgtgac ttttatggaa 1920
ttaagagatg aagaagatga gatattttag catttatatt tttcaaaaat atatgtatac 1980
ttaaaaataa agtaacttta tgcatttaaa aaaaaaaaaa agggsgggcc gtttttagagg 2040
atccangttt acnncc

```

2056

&lt;210&gt; 439

&lt;211&gt; 721

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (688)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 439

```

ggcggcgcg ggcaggtcgga gctcggagct gctgcttctg gttctcttgt ggccgcccgtc 60
gctgtccggc tgccttgggc tgccgaacag acaaggcgtg ggccacagca cctcagaagc 120
cgacgcagct cgacgcaggg gccggcagga ggggtgggca tcgctgtctg gaggggcgccg 180

```



```

cgcgggcagg cgggcgggcg ccagaggggg aaagaggcgg gggcggcggg tcagccgctg 240
gccgggcccgg ccgggggaatg tcgatgcccg acgcgatgcc gctgcccggg gtcggggagg 300
agctgaagca ggccaaggag atcgaggacg ccgagaagta ctccctcatg gccaccgtca 360
ccaaggcgcc caagaagcaa atccagtttg ctgatgacat gcaggagttc accaaattcc 420
ccaccaaaaac tggccgaaga tctttgtctc gctcgatctc acagtcctcc actgacagct 480
acagttcagc tgcattcctac acagatagct ctgatgatga ggtttctccc cgagagaagc 540
agcaaaccaa ctccaagggc agcagcaatt tctgtgtgaa gaacatcaag caggcagaat 600
ttggacgccg ggagattgag attgcagagc aagacatgtc tgctctgatt tcaactcagga 660
aacgtgctca gggggaraag cccttggnctg gtgstaaaat akkgggyttg acacattaca 720
g 721

```

```

<210> 440
<211> 1041
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (1025)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (1030)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (1039)
<223> n equals a,t,g, or c

```

```

<400> 440
ctcgtgcgcg gacattgtca gctgcgtttc cgcggtcgcg gttgaggagc tcaagcttgg 60
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cctggagcca tatatatacc ctctggtttc ccccttcggt agtcgtatat ggcctaagaa 180
agcaatacaa gaatccaatg atacaaacaa aggcaaagta aactttaagg gtgcagacat 240
gaatggatta ccaacaaaag gaccaacaga aatctgtgat aaaaagaaag actaaagaaa 300
ttttcctaaa ggaccccatc atttaaaaaa tggacctgat aatatgaagc atcttccttg 360
taattgtctc tgaccttttt atctgagacc ggaattcagg ataggagtct agatatttac 420
ctgatactaa tcaggaaata tatgatatcc gtatttaaaa tgtagttagt tatatttaat 480
gacctcattc ctaagttcct ttttcgttaa ttagactttc atttctgtta ttgctgtttg 540
aataatatga ttaaatagaa ggtttgtgcc agtagacatt atgttactaa atcagcactt 600
taaaatcttt ggttctctaa ttcatatgaa tttgctgttt gctctaattt ctttgggctc 660
ttctaatttg agtggagtac aattttgttg tgaaacagtc cagtgaact gtgcagggaa 720
atgaaggtag aattttggga ggtaataatg atgtgaaaca taaagattta ataattactg 780
tccaacacag tggagcagct tgtccacaaa tatagtaatt actatttatt gctctaagga 840
agattaaaaa aagataggga aaagggggaa acttctttga aaaatgaaac atctgttaca 900
ttaatgtcta attataaaat ttaaatcctt actgcatttc ttctgttcct acaaatgtat 960
taaacattca gtttaactgg taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1020
aaaancccn ggggggggnc c 1041

```

<210> 441  
<211> 1995  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1957)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1992)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1995)  
<223> n equals a,t,g, or c

<400> 441  
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gaggagtgtc atccctaaga atttctagca gcaaaggctc ccttggtgga ggatttagct 180  
cagggggggtt cagtgggtggc tcttttagcc gtgggagctc tgggtgggggc tgctttgggg 240  
gtcatcagg tggctatgga ggattaggag gttttggtgg aggtagcttt cgtggaagct 300  
atggaagtag cagctttggt gggagttagt gaggcagctt tggagggggc agtttcggag 360  
gtggcagctt tgggtgggggc agctttggtg gaggcggctt tgggtggaggc ggctttggag 420  
gaggctttgg tgggtggattt ggaggagatg gtggccttct ctctggaaat gaaaaagtaa 480  
ccatgcagaa tctgaatgac cgcctggctt cctacttgga caaagttcgg gctctggaag 540  
aatcaaaacta tgagctggaa ggcaaaatca aggagtggta tgaaaagcat ggcaactcac 600  
atcaggggga gcctcgtgac tacagcaaat actacaaaac catcgatgac cttaaaaatc 660  
agattctcaa cctaacaact gataatgcca acatcctgct tcagatcgac aatgccaggc 720  
tggcagctga tgacttcagg ctgaagtatg agaatgaggt agctctgcgc cagagcgtgg 780  
aggctgacat caacggcctg cgtagggtgc tggatgagct gaccctgacc aaggctgacc 840  
tggagatgca aattgagagc ctgactgaag agctggccta tctgaagaag aaccacgagg 900  
aggaaatgaa agaccttcga aatgtgtcca ctggtgatgt gaatgtggaa atgaatgctg 960  
ccccgggtgt tgatctgact caacttctga ataacatgag aagccaatat gaacaacttg 1020  
ctgaacaaaa ccgcaaagat gctgaagcct ggttcaatga aaagagcaag gaactgacta 1080  
cagaaattga taataacatt gaacagatat ccagctataa atctgagatt actgaattga 1140  
gacgtaatgt acaagctctg gagatagaac tacagtccca actggccttg aaacaatccc 1200  
tggaagcctc cttggcagaa acagaaggtc gctactgtgt gcagctctca cagattcagg 1260  
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accgcagcct gctagaagga gaggaagtt ccggaggcgg cggacgcggc ggcggaagtt 1440  
tcggcgcgcg ctacggcggc ggaagctccg gcggcggaag ctccggcggc ggccacggcg 1500  
gcagttccgg cggcggctac kgaggcgga gctccggcgg cggaagctcc ggcggcggct 1560  
acggggcgcg arctccagcg gcggccacgg cggcagttcc agcggcggct acggtggtgg 1620  
cagttccggc ggcggcggcg gcggctacgg gggcggcact ccggcggcgg cacagctccg 1680  
gcggcgkata cggcggcggc acagctccgg cggcggatac ggcggcggca cagctccggc 1740  
ggcggatacg gcggcggcac tccagcgag gccacaagtc ctctcttcc gggctccgtg 1800

gcgagtcttc atctaagga ccaagggtcag cagaaactag ctggggtaat cagaattagt 1860  
tttaacttcc tgtgatggtt tttttgcgct ttaactctag agttgtttta aaaaattaaa 1920  
aatcttagag cggttccggt gcattgttca caactantct taacaccagc cgtgaaaatg 1980  
gctgatcaaa tncan 1995

<210> 442

<211> 1723

<212> DNA

<213> Homo sapiens

<400> 442

agcagcactt ccggtacgaa aaactcgctg ctgccccaac ctggcttgac aggcttggtc 60  
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cgccgtcccg cagctgctgt ttccggagtt gccccttccc catgttccgg ggcaggagtc 180  
cgcaaagcga agatccgccc gccggttcct catcatgtcc gaactgacta aagagctgat 240  
ggagctggtg tggggcacca agagcagccc cggctctctg gacaccattt tctgccgctg 300  
gacgcaaggg tttgtgttta gtgaatcaga gggatctgca ttagaacagt ttgaagggtg 360  
cccctgtgct gttattgcac ctgttcaggc atttcttttg aagaagctcc tgttttcttc 420  
ggagaagtct tcttggcggg attgttcaga ggaagagcag aaggaaactcc tttgtcatac 480  
cttgtgtgat attttagaaa gtgcttggtg tgaccactct ggatcatact gcttggtttc 540  
atggttaaga ggaaagacaa ctgaggaaac tgctagtatt tctgggagtc ctgcagagtc 600  
tagttgccaa gtggaacatt cttctgcctt ggctgtcgaa gagcttggtt ttgagcgatt 660  
tcatgcatta attcaaaaaa gatcgttcag aagtttacca gaattaaaag atgctgtctt 720  
ggaccagtat tcaatgtggg gaaataaaat tggagtattg ctttttctgt attctgtatt 780  
actgacaaag ggcattgaaa acataaaaaa cgaattgaa gatgcaagt aacccttgat 840  
agatcctgta tatggacatg gcagccaaag ttaattaat ctctgtctga cgggacatgc 900  
tgttttctaat gtatgggatg gtgatagaga gtgctcagga atgaaacttc ttggtataca 960  
tgaacaagca gcagtaggat ttttaacact aatggaagct ttaagatact gtaagggttg 1020  
ttcttacttg aaatctccaa aattccctat ttggattggt ggcagtgaga ctcacctcac 1080  
cgtatttttt gccaaaggata tggctttagt tgcccctgaa gtccttcag aacaagccag 1140  
aagagttttt caaacctacg acccagaaga taatggattc atacccgatt cacttctgga 1200  
agatgtgatg aaagcattgg acctgttttc agatcctgaa tatataaatc tcatgaagaa 1260  
taaattagat ccagaaggat taggaatcat attattgggc ccatttcttc aagaattttt 1320  
tcttgatcag ggctccagtg gtccagaatc ttttactgtc taccactaca atggattgaa 1380  
gcagtcaaat tataatgaaa aggtcatgta cgtagaaggg actgcagttg tgatgggttt 1440  
tgaagatccc atgtacaga cagatgacac tcctattaaa cgctgtctgc aaaccaaag 1500  
gccatacatt gagttactct ggaccacaga tcgctctcct tactaaatt aatttgtcta 1560  
agtatttata aggaagatct taataacaga tgttgaaaga aggagtcaag actggcaatt 1620  
ggctggatta agctaaacac tggatatcact gattaactgt aaataacaat taaaaacaca 1680  
ttttcagtgt taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 1723

<210> 443

<211> 1899

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (327)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1878)

<223> n equals a,t,g, or c

<400> 443

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cttccgcttc agcctcccaa aatgctgtag gtcacagggg gggctgtcgg ggggctgtta 60
ggtgcctgga tgacaagtgg acagtttaag ccggttcctc agatcctaag ggagctgccc 120
cctgccgagc aacaraggct ctttaacgaa gccgcagcca tcatcaggca cctggagtgg 180
acggacgccg tgcagctgac tgcgctgggc atgggcagcg aggccctgca gcagcagcts 240
ctggccatgc tgggtgaacta cgtcaccaag gagctgctgg ccgagatcca gtatgatgac 300
tagggccgac ctccggggag gtgrggnkgc ccctttaaat gactctgtga ttctgaagag 360
gtggcttggg agttgggaga agcccagcgg atgccccctg gggaatctcc acatcatcag 420
tgtattacta gtaatgtccc gctggagagg ccaccgctgt gcagtgtcat gttccagaaa 480
ttactgatga agcagcatgt gttggtggca tgtgactgg cctgccatga cagccctctg 540
actggcccc cagtgaagag taaaggcctg cctgccgcag yttcggaggc gtctgctgag 600
tcctctcacc cgcattgggtc tggggaagtg atcacgctca gccgacggtc tgaccacact 660
tcatcctccc ccgggggcct tctcatcttg ggagatgact cctcttcaga gcacctgctg 720
caggactgga tcccaccccs ctgcaggctc tgggggtctca gggccttgga gcagcccatg 780
ctggaatcat gtttacctcc tagtgcaacc gtcccctacc cagggactgt cgaatggccc 840
cacggagggg acggggcgcc tgctgagtga agccacaaat accgagtgga cttgaccccc 900
gccccacta ggctgcacac ctagactcgc cctgccaggg cctcgtctct cccatctgaa 960
aagtcctggt agttcttgag gtttacttct caaatgaaat attttttagta aaaagtacag 1020
gtatatctcg gagatattgt gggttcagtt ccagaccacc tcggtaaagc caacatcaca 1080
ataaagcaag gaagcgcat gttttagttt ccagtgcat ctaagtcatg tttactgcat 1140
attgcagtc actaaatgtg caatagcatt atgtctaaca aatatacaaa ccttaattta 1200
aaaatattta ctgttcaaaa tgctgacaca gaaacgcaaa gtgagcacat gctgttgga 1260
aatggtgcca aatagacttg cctgatgcca ggctgctaca aaccttcaat ttaaaaaaaa 1320
aaaacagtat tcacaaagca tagtagaatg aggtatgcct gtattgctct ttctgaagtg 1380
gtgtgatata aaccatctct aagaaatgtt tctaccstaa agatttcccc agtacagtca 1440
gctctcygta actgtggtct ccacatttag atccaaccag ccttgatag gaaatatattg 1500
aaaaaagaaa ttgcattggt actgaacacg tacagacctt tttttcttgc cattattccc 1560
taaacaatat ggtgtagcat atttacatag catttatatt gtatttggtt ttataagaaa 1620
tctagagatg atttaaatta tacaggaagg tgtgcgtagg ttacgtgcaa acgctatgcc 1680
attgccatc agggacttga gcacccctag atgtcgggtg ctgagggttg aggttgagc 1740
cctggaaccc atcccccatg gatactgagg catagctgta ctgtgtgttt tcaactttgct 1800
ttcagaacta cgacttgaat gtgatcgatt acaataaatg tttttctaaa aagccaaaaa 1860
aaaaaaaaaa aaaccccnng gggggcccg taccaattc 1899
```

<210> 444

<211> 430

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (395)

<223> n equals a,t,g, or c

<220>

<221> misc feature

&lt;222&gt; (413)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 444

```
actacaaaaa ggagtgctga agccaatcac catgtaagca agataaaagc aaaggggggtc 60
ttgcctgccc atctctgttc catacattct taccaggcac tgagagtcac ggggagttta 120
agactccatc ccacatactc cttttgaaac tgggccagtg tacaacatcc agtgaagagt 180
ataggatggc atagacttac caactcaaag aatggaagga ttctagaaac attatagtcc 240
aacctcctca attcatcggt gatacacaaa ggcccactaa gctgtgtggt tcactcagca 300
tcacgtggct aatatgatat gaagccacac tagcttgtcc tcagctgtgc caagaatgag 360
agctgccttc tccaaacctt aaaccaaccc atggnatcat taacacctct ttnaaatcca 420
tagggcagtg                                     430
```

&lt;210&gt; 445

&lt;211&gt; 2153

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (166)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 445

```
agggtgcctgg gtcgcagcct cttgagacgg gagccctccg agaagactca ctgcccccca 60
gaatcctact gcacccctgg tttgagtccg tcttggaacc cgggtacatc gactcagaaa 120
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<210> 446

<211> 492

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (305)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (474)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (489)

<223> n equals a,t,g, or c

<400> 446

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gatgacgtcc agggctatgc ccgcaagccc gtctcccgtc acctgtgtga gctgctggca 420
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<211> 1539

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (20)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (25)

<223> n equals a,t,g, or c

<400> 447

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<210> 448

<211> 3983

<212> DNA

<213> Homo sapiens

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<220>

<221> misc feature

<222> (67)

<223> n equals a,t,g, or c

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<222> (227)

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<221> misc feature

<222> (328)

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<222> (1010)

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<222> (3255)

<223> n equals a,t,g, or c

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<211> 1177  
<212> DNA  
<213> Homo sapiens

<220>  
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<212> DNA  
<213> Homo sapiens

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<220>  
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<222> (2037)  
<223> n equals a,t,g, or c

<220>  
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<222> (2343)  
<223> n equals a,t,g, or c

<220>  
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<222> (2348)  
<223> n equals a,t,g, or c

<220>  
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<222> (2375)  
<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
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<223> n equals a,t,g, or c

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<210> 451  
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<212> DNA  
<213> Homo sapiens

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<222> (222)  
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<210> 452  
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<212> DNA  
<213> Homo sapiens

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gaagtttaag ccggactcca agtccacctc ctttcagagg cagaaacaca gcaatggatg 840
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agc 963
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<210> 453  
<211> 604  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (12)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

<222> (517)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (540)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (567)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (593)  
<223> n equals a,t,g, or c

<400> 453  
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atccagaaca ctcatatgag tttaagcatt ccagaccaa gaagccacgg agtctaagaa 180  
tttatgaatc tcatgtggga atttcttccc atgaaggaaa agtagcttct tataaacatt 240  
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caatcatgga gcatgcttac tatgccagct ttggttacca aatcacaagc ttctttgcag 360  
cttccagccg ttatggaaca cctgaagagc tacaagaact ggtagacaca gtcattyca 420  
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gggattggaa tatggtttgg atgggggaca gatccnggt taattttcca ttcttggan 540  
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cagt 604

<210> 454  
<211> 1917  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1256)  
<223> n equals a,t,g, or c

<400> 454  
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gatgcccgcc ggtgcgtctg gagatgggga cggcgggagt tgagttgtgg cagtagtyga 180  
gttgtaattt gtgggcggag gcagkaggag actccccacc ctccaccctt gccccactct 240  
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cgtctcccgc cccagggcaa tccccagtc cctcccgccct ccacgagagc ctggagctct 360  
cagcctcgcc cggggctcca ctctctctc cggctccctg ggctgttttg ctctaacgat 420  
cttgccagat ccctccctct gtagacaacc accaacctct gtttgctggt gaattctctc 480  
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attccaagta tctttgtgtt ttctctttaa tatttaaact tattctctct gtgagtatat 1860  
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<210> 455

<211> 1538

<212> DNA

<213> Homo sapiens

<400> 455

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ggcaggagcc ttccttacac ttcgccatga gtttccctsat cgactccagc atcatgatta 180  
cctcccagat actatttttt ggattttgggt ggcttttctt catgcgccaa ttgtttaaag 240  
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gcaccatgtt tgagctcatc atctttgaaa tcttaggagt attgaatagc agctcccgtt 360  
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tgattggagt gactctcatg gctcttcttt ctggatttgg tgctgtcaac tgcccatata 660  
cttacatgtc ttacttcttc aggaatgtga ctgacacgga tattctagcc ctggaacggc 720  
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cagagactgt aaaaaaaaaa aaaaaaaaaa gggcgggc 1538

<210> 456

<211> 2189

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<400> 456

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aatgtgaagt tacaataaac ttctgcttgt tttctcagaa catctttggc atgaggaaga 240  
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cctacctgaa ctgtgaggaa cagagtgtat agtacaaatg taattaggca ttgcctcctg 420  
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actacaaaag attaaaaaag gagagggaga aaaaaaaagg ccagttatga ttttaatagc 660  
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aaacctttta tctcctaaaa aaaaaaaaaa 2189

<210> 457

<211> 1399

<212> DNA

<213> Homo sapiens

<400> 457

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gagacatgtc cctatgacat agcagtgggtg agcctggagg aggacctgga tgatgtcccc 180  
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ctattgaaaa accwcwrtat ttatatttca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1380  
aaaaaaaaaa aaaaaaaaaa 1399

<210> 458

<211> 709

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (57)

<223> n equals a,t,g, or c

<400> 458

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agtagctttt cacttaattg actagcatgt atgggtttct ttaccacagg ccacaattca 120  
ctacacaggc ccagaaaaaa agctgatctc tgaaaaagcac taggagaagg cagctagaga 180  
gggagaattc taattaggcc ggggtcctct gtggcttgaa tgactgaata agtttttata 240  
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caaccaatca aacaacaaaa acaatccaaa gaaagagact tggacatagg catcaaggaa 420
tcatttcact ttataattta atagaacact ggtgtatcat tcattaattc tgaaagtga 480
aactaaatgt aaaataattt tgtaagggtt gtgaattgtt gcctaggtat tctggtgatg 540
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agggttcata acgttgacat tctgttggtg caatcataat ctctgtttt gttttagtcc 660
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<210> 459

<211> 1283

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (86)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (145)

<223> n equals a,t,g, or c

<400> 459

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gtgcccagag agcctcccgt caagaagctc atgcggacat ccacgccgc gcccgccagc 660
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gcggtttctt tggcattagg gacagcagct tcctgtagcg aggaagcgtg ttgtcttaca 1140
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```

<210> 460

<211> 435

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (431)

<223> n equals a,t,g, or c

<400> 460

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tcgacccacg cgtccgcaag tacaaaaacc ttaagtttca tttgtagggc cacagatcat 60
agaatttcaa atgacatatt acatagtttg taaatgtata tatttggttg actgaaactt 120
aatcataatt tagttcttaa aactatgttg cttgaagtgg caagtagcaa gtactgattt 180
taccagattc aagttgattt ttaaaagtaa ccattggaga aatcggtata ctttggttg 240
caggattttt acctcctata actccaccag aaaagttttt tctttcccag ctgatgctgg 300
cacccccacg ggaactcttc aaaaagacgc ctgcgcagat tgcactgatg gacgttgga 360
acatggggcca gtctgtggam attagtgggc tcagtttagc ttggccggtg aggrggaayc 420
agtgtttggg nattc 435
```

<210> 461

<211> 654

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (138)

<223> n equals a,t,g, or c

<400> 461

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tgatgcctgc atgtgggtac ctgggctcca tcaggttcta gatcggcctc cgccctccac 120
tttcagggct ccaggccnag cttctcatgt ctgtggggag ggtctccaga gccttggtct 180
gtggctgagc tgtggaactt gaaggcctct ctgcaccttg tcaactcgtg cccctgcacc 240
ttgggtcatg acctgcttta tgtggcaacc ctgtgacagc tgctaagtcc tagaaaacac 300
gtaacaggac gtgaggtgcc ctctgcgccg tgtgggcgcg tgcggggaga cccggggccc 360
aggacgtgag gtgccctctg cgccgtgcgg gcgcgtgcgg ggagaccggg gccacatgcg 420
agcggggccc cgagacattc tgcaactcgg aattgcgggg attatcaaat cccgcttcag 480
tgggaaacgt gagcgaacc caaggtgagt ggccgcagcc ttctgtcacg tgctctcccg 540
catgtcctaa gtragggtc aggctgagct gccgttgccg agagccttgt gtctgcttcg 600
ggtgtctgca ctgtgagtgg ctccgtgctr gcgtccgcac cagccgcttg gggc 654
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<210> 462

<211> 2245

<212> DNA

<213> Homo sapiens

<400> 462

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aattacccgg tcgacccacg cgtccattgt cccaatgtgc ccggctcagc ctgaggaagc 60
agtcgctctt ccaggagcca ggtcccgatg tggaggccta gcgccgagga acagtgcctg 120
gcacccgcct ggcccgcag acccaccctg ccaacatcaa gttgttcctt ctgctccgga 180
gacccctggg gtgcggccct ggccccctcc acccctgctg ggccagagcg ggtgggcagt 240
gtcaaggccc gctgtctccc aggtgcttgc tgggactcgg ggcggtgca cctggctgtc 300
acctgggtgt gctgctgtga ggggtccttg cgtggccccc atccttcccc caatgcagaa 360
```

ctccatgggc agggagctgg ggggacatct cacctcccc atggcacaga gccctccaca 420  
cccctggacc agggcatccg ggccctagaa attccacagc tcccgtcctg gccaccctgg 480  
aagctcatca ggccaagacc cggacagagc ttcagaggag tggtgagtga cacctgagga 540  
tgcggctgca cacactcagc caagggccga gtctcacctg cgggtggggtt tcggctctgc 600  
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gggactgttc acagttgtca cctgcagacc tgcctctccc tggcctgagg ttcaaaggcc 720  
tcatcggatg gtcagtacag tggggtcacc tggtgtttct atacaacagc agggaagggg 780  
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tccccacct gcccttctg ggtgacacag ccggtaaaac gaatcacgta tggttctttc 2040  
tgtgggtctg tggcacagca ggaagagccc sgtgccgcca gcacctgtg gaagaccaca 2100  
catgggtggt ccacagcat gggaccaggc tggcctgagg gatgccaggt tgtaacaatg 2160  
ctgctgtcac tgtctcatta aatatacatc ctttaaaaaa aaaaaaaaaa aaaaaaaaaa 2220  
aaaaaaaaaa aaaaaaaaaa aaaaaa 2245

<210> 463

<211> 1280

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1016)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1137)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1242)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1254)

<223> n equals a,t,g, or c

<400> 463

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caggaataatg ctgtccagtg ggggtgtgtac atcaactgtt cagcttcctg ggaaagtagt 180
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aggagctcga gtatatttag cttgccggga tgtggaaaag ggggaattgg tggccaaaga 300
gatccagacc acgacagga accagcaggt gttgggtgcg aaactggacc tgtctgatac 360
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atcaacaatg caggagtgt gatgtgtccg tactcgaaga cagcagatgg ctttgagatg 480
cacataggag tcaaccactt gggtcacttc ctccaaacc atctgctgct agagaaacta 540
aaggaatcag ccccatcaag gatagtaa atgtcttccc tcgcacatca cctgggaagg 600
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aaggttttca aaaccttag cacaagaga gcaaaacctt ccagcctggc caacatnggt 1140
gaaacccac ctctactaaa aattgtgtat atctttgtgt gtcttcctgt ttatgtgttg 1200
ccaaggagat attttcacia agttcaaac agccacagta antcagagat ggangaac 1260
cagtgcacac cagtctttac 1280
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<210> 464

<211> 2431

<212> DNA

<213> Homo sapiens

<400> 464

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tgcggtcacg gcaggattcg gttaggagga acagcacagc atgctgggct ctggatttaa 120
agctgagcgc ttaagagtga atttgagatt agtcataaat cgccttaaac tattggagaa 180
aaagaaaacg gaactggccc agaaagcaag gaaggagatt gctgactatc tggctgctgg 240
gaaagatgaa cgagctcgga tccgtgtgga gcacattatc cgggaagact acctcgtgga 300
ggccatggag atcctggagc tgtactgtga cctgctgctg gctcggtttg gccttatcca 360
gtctatgaag gaactagatt ctgggtctggc tgaatctgtg tctacattga tctgggctgc 420
tcctcgactc cagtcagaag tggctgagtt gaaaatagtt gctgatcagc tctgtgcca 480
gtatagcaag gaatatggca agctatgtag gaccaaccag attggaactg tgaatgacag 540
gctaattgca aagctgagtg tggaaagccc acccaaaatc ctgggtggga gatacctgat 600
tgaaattgca aagaattaca acgtacccta tgaacctgac tctgtgtgca tggcagaagc 660
tcctcctggg gtagagacag atcttattga tgttggtatc acagatgatg tgaagaaagg 720
aggccctgga agaggaggga gtgggtggctt cacagacca gttgggtggc ctgatggaac 780
ggtgccagat gcccatgccc atgcctatgc catctgcaaa tacgcctttc tcatatccac 840
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tgccaaaggg accatcagat ttcaatggac tgccaatggg gacttatcag gcctttccca 900  
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 2431

&lt;210&gt; 465

&lt;211&gt; 589

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 465

agggtaacat tcaacaatct atccatctcc ggagaacttg aagctgttca gaatatggta 60  
tctactgttg aatgtgctct taaacatgtc tcagattgggt tggatgaaac aaataaaggc 120  
acaaaaacag aggggtgagac agaagtgaag aaagatgagg ccggagaaaa ctattccaag 180  
gatcaagggtg gtcggacatt gtgtgggtgta atgaggattg gcctgggttg aaaaggcttg 240  
ctgattaaag atgatatgga cttggagctg gttttaatgt gcaaagacaa acccacagag 300  
accctgttaa atacagtcaa agataatctt cctattcrga ttcagaaact cacagaagag 360  
aaatatcaag tggaacaatg tgtaaatgag gcatctatta taattcggaa taaaaagag 420  
cccacgctaa ctttgaagggt gatacttacc tcacctctaa ttagggacga attggagaag 480  
aaggatggag aaaatgtttc gatgaaagat cctccggact tattggayag gcagaaatgc 540  
ctgaacgcct tggcgtctct tcgacatgcc aaatgggttc aggcaaggg 589

&lt;210&gt; 466

&lt;211&gt; 1107

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

<221> misc feature

<222> (1099)

<223> n equals a,t,g, or c

<400> 466

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ggacaccggc ggagcctccc cgccccgcg gaagaaaccc cgccagcaac aatagcaaca 120
gcctgaatgt caataacggg gttcccggcg gggcgggcgc cgcatcctca gccaccgtcg 180
cagctgcctc cgccaccacc gccgcctcct ctctcctggc caccocagaa ctgggcagca 240
gcctcaagaa gaagaagcgg ctctcccagt cagatgagga tgtcattagg ctaataggac 300
agcacttgaa tggcttaggg ctcaaccaga ctggtgatct cctcatgcaa gagtcaggat 360
gtcgtttaga acatccttct gctaccaaata tccgaaatca tgtcatggaa ggagactggg 420
ataaggcaga aaatgacctg aatgaactaa agcctttagt gcattctcct catgctattg 480
tggttaagagg cgacttgtaa atctctcaaa cggtgttggg aataattgtg aggatgaagt 540
ttttgctgct gcagcagaag tacctagaat acctggagga tggcaaggtc ctggaggcac 600
ttcaagttct acgctgtgaa ttgacgccgc tgaaatacaa tacagagcgc attcatgttc 660
ttagtgggta tctgatgtgt agccatgcag aagacctacg tgcaaaagca gaatgggaag 720
gcaaaaggac agcttcccga tctaaactat tggataaact tcagacctat ttaccaccat 780
cagtgatgct tccccacgg cgtttacaga ctctcctgcg gcaggcgggtg gaactacaaa 840
gggatcggtg cctatatcac aataccaaac ttgataataa tctagattct gtgtctctgc 900
ttatagacca tgtttgtagt aagaggcagt tcccatgktt atacgcagca gatacttacg 960
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ggaatacaca ccctgcttna aacttgc 1107
```

<210> 467

<211> 2197

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (846)

<223> n equals a,t,g, or c

<400> 467

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actcaaaatt gcaccaagac accttgtctc ccaaagtcaa aatgtgaaat acgcaatgga 180
attgaagcct gctattgcaa catgggattt tcaggaaatg gtgtcacaat ttgtgaagat 240
gataatgaat gtggaaattt aactcagtc tgtggcgaaa atgctaattg cactaacaca 300
gaagggaagt attattgtat gtgtgtacct ggcttcagat ccagcagtaa ccaagacagg 360
tttatcacta atgatggrac cgtctgtata gaaaatgtgr atgcaaactg ccathtagat 420
aatgtctgta tagctgcaaa tattaataaaa actttaacaa aaatcagatc cataaaagaa 480
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tttttngatt catataacat gaaacatatt catcctcata tgaatatgga tggagactac 900
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ataaatatat ttccaaagag aaaagctgca tatgattcaa atggcaatgt tgcagttgca 960
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tgcctaatac ttcttgtaa tctcttggtc tttggagtca tcatatacaa agtttttcgt 1860
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ttcaaaaatg tccctgttg ttttgatgt ttaagctgtt gaaatgaagt ctgccaaatc 2160
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<210> 468

<211> 3611

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3574)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3581)

<223> n equals a,t,g, or c

<400> 468

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cgtacagtat ctccgacgca cagggttcat agtggcgtca tgcacgcaga ctcctgcaag 120
ttcccctaag ttcttagagg actgctttgc cttttgatct gagagttgca aagttccata 180
aagaatggcc cttgtggata agcacaaagt caagagacag cgattggaca gaatttgtga 240
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ctgccacatc ctcaacctgt accggagaac acgtggctgt accaggcact gcgggaaggc 660
acgcgggttc agagcgtgga gcagatccgc gaggtggcct cgggagcggc ccgcacccgt 720

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tccttgggcg tgcagagggt ctacaccctg caggatttgc tgtatcagag cgactgcgtc 900  
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cagatgaggc agggagcatt ccttgtgaac gcagcccgtg gcggcctggt ggacgagaaa 1020  
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<212> DNA  
<213> Homo sapiens

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<210> 470  
<211> 879  
<212> DNA  
<213> Homo sapiens

<220>  
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caaggagagc gggcaattcc cgcagtcaag acaggttgc 879

<210> 471  
<211> 2557  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (121)  
<223> n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (461)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 471

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 <213> Homo sapiens

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 <222> (455)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (466)  
 <223> n equals a,t,g, or c

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<210> 473  
 <211> 1840  
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 <213> Homo sapiens

<400> 473  
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<211> 1258

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (36)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (528)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (726)

<223> n equals a,t,g, or c

<400> 474

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<213> Homo sapiens

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<220>  
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<223> nequals a,t,g, or c

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<222> (4184)  
<223> n equals a,t,g, or c

<220>  
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<222> (4223)  
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<210> 476  
<211> 691  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (689)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (691)  
<223> n equals a,t,g, or c

<400> 476  
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<210> 477  
<211> 1418  
<212> DNA  
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<220>  
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<222> (93)  
<223> n equals a,t,g, or c

<220>  
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<222> (396)  
<223> n equals a,t,g, or c

<220>  
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<222> (432)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature



<222> (1127)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1143)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1289)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1319)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1399)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1400)  
<223> n equals a,t,g, or c

<400> 477  
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gtctccgaag ccaaggccca ctccgcgacg tccaggactt ctggatcagc ctcccaggga 180  
cactgtgcag tgagaagatg gccctgagca ctgccagtga tgaccgctgc tggaacggga 240  
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ccttcctcct gccctcctc ctcttcctgg cccttacagt agccaggccc cgggtggcgg 660  
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acttggaacc caaccttgnn gctttctggc ttggaagg 1418

<210> 478  
<211> 1237  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1232)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1236)  
<223> n equals a,t,g, or c

<400> 478  
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cctacacagg ggccccctaa ctctgtccc ccttctctac tcctttgctc catagtgtta 1140  
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aaaaaaaaaa aaaaaaaaaa tttggggggg gnccng 1237

<210> 479  
<211> 1098  
<212> DNA  
<213> Homo sapiens

<400> 479  
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tcctgccgga acaggaggac gcggaaggcc ctgggggtgc agtggagcga ccgttgagcc 180  
tgaatgctag agcgtgctcg cgggtgcgcg ttgtatgcgg tccgggcctt cggcgctgtg 240

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accatgtgat tggcatagtg acagctaaat ctggagatat attcaaagtt gatgttggag 420
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<210> 480

<211> 684

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<400> 480

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<210> 481

<211> 2995

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1760)

<223> n equals a,t,g, or c

<400> 481

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<210> 482  
<211> 1248  
<212> DNA  
<213> Homo sapiens

<400> 482  
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gtatacactg tgggacgaga caccaatgtc ttggttacat caaaagaagg ctagcaatgt 180  
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<210> 483  
<211> 1862  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (124)  
<223> n equals a,t,g, or c

<400> 483  
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caataaaaaa aggaaatgaa agcagcagca agggaagaag caaaaaatat caagctgcta 660  
gaaaccactg aggaagataa acagaaaaac tttctatttt tacgactttg ggataggaat 720

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aa

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&lt;210&gt; 484

&lt;211&gt; 1664

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 484

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<210> 485  
<211> 969  
<212> DNA  
<213> Homo sapiens

<400> 485  
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<210> 486  
<211> 2572  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (823)  
<223> n equals a,t,g, or c

<400> 486  
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<210> 487

<211> 1451

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1256)

<223> n equals a,t,g, or c

<400> 487

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aaaaaaaaa a 1451

<210> 488

<211> 1200

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (285)

<223> n equals a,t,g, or c

<400> 488

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aagtggaatg tatgttgtaa tagaagttaa agttgcaact caagaaggaa aagaaataac 360  
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gattatttgc atgggtgcaa aagaaaatgg tttgccgctg gagtatcaag agaagttaaa 480  
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<210> 489  
<211> 285  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (21)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (242)  
<223> n equals a,t,g, or c

<400> 489  
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<210> 490  
<211> 682  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (57)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (62)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (80)  
<223> n equals a,t,g, or c

<400> 490  
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cggcccttct gctgcacaca gcccaccag gacctccgc agcgtgaca ggcggggcgg 180  
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<210> 491

<211> 1859

<212> DNA

<213> Homo sapiens

<400> 491

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aaaaaatgaa agacgctctg tttaaaacaa tgatgacagc agtacttaat atgtatttcg 180
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<210> 492

<211> 2709

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2160)

<223> n equals a,t,g, or c

<400> 492

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gatgagttca ttgagagtat ttcccttctg ccggaacctg agaagaccct gcacactgaa 180
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<210> 493

<211> 1451  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (1307)  
<223> n equals a,t,g, or c

<400> 493  
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atgacaaaagg tagaaaaaag cacaaatgaa gcaatggagt ggatgaataa caagctaaat 180  
ctgcagaaca agcagagttt gaccatggat ccagttgtca agtcaaaaga gattgaagct 240  
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<210> 494  
<211> 1268  
<212> DNA  
<213> Homo sapiens

<400> 494  
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tactaatacc caccttgtag tgttgctatg aagattgaga taatcctcag cagtgtcag 480  
caccatgagg cccaacacac acagatcaga tgttcaaatt tcagatctta ccatcatcca 540

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<210> 495

<211> 384

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (360)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (382)

<223> n equals a,t,g, or c

<400> 495

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<210> 496

<211> 975

<212> DNA

<213> Homo sapiens

<400> 496

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ctaaaaggag ataattattc tctgctacaa agtgtctcca actagaaatg atcaatgaag 360
tgagaaattg ttgagaagga tacagtttgt ttttagatgt cctttgtcca atgtgaacat 420

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agtaacacca ttcgttgytg gtatttagtt ttctgaaggg tcgcagttgc cttgagcact 600  
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gtaagcttcc agtattggga ggtggagaag gggagggttc agaaaaataa ataagagtta 720  
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tcmctgtgag gtcttkgtga attttatcgc taagatcaga atgtgagaag tatttgagata 900  
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<210> 497

<211> 2075

<212> DNA

<213> Homo sapiens

<400> 497

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2075

<210> 498

<211> 1904

<212> DNA

<213> Homo sapiens

<400> 498

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at ttgtttttt ttttctcaca acatctggcc tatattgtct gtcaggargc catgggtcca 180
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<210> 499

<211> 2871

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (267)

<223> n equals a,t,g, or c



&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1642)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 499

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<210> 500

<211> 1624

<212> DNA

<213> Homo sapiens

<400> 500

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aaaa 1624

<210> 501

<211> 848

<212> DNA

<213> Homo sapiens

<400> 501

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gaggaaccag tcataactgc aagctgttta cacaaggaat attatgagac aaagaaagt 180  
gcttttcaac aacaaagaag aaagcagcca tcagaaatgt ttcgttttgt gttaaaaagt 240  
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aagatgctgc tcttagtatt tcatgattgg tggaagctct caagctccag gagcaactta 540  
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tcttgaccac ccattacatg tcagaggcta agtctctgtg tgaccgtgtg gccatcatgg 780  
tgtcaggaac gctaagggtg attggttcca ttcaacagct gaaaagtttg gttaaagatta 840  
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<210> 502

<211> 3192

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3085)

<223> n equals a,t,g, or c

<400> 502

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cagccgagca gatggatttc cgtgccaaacc tgcagcggca agtgaagcca aagactgtgt 180  
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gcaacgccaa gcctgccgag accctgaagc ccatgggcaa tgccaagcct gatgagaacc 540  
tgaaatccgc tagcaaagaa gaactcaaga aagacgttaa gaatgatgtg aactgcaaga 600  
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<210> 503

<211> 683

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (622)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (626)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (648)

<223> n equals a,t,g, or c

<400> 503

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ccgcagttcg tccccgcggc tacggcggtg tgctcccgac cctgcaggcg gctggatgtt 120
ggggcgagsg gcaagatggc agaagtagag cagaagaaga agcggacctt ccgcaagtgc 180
acctaccgag gcgtggacct cgaccagctg ctggacatgt cctacgagca gctgatgcag 240
ctgtacagtg cgcgccaggc ggcggctgaa ccggggcctg cggcggaagc agcactccct 300
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gctgaagcgc ctgcgcaagg ccaagaagga ggcgcgcgcc atggagaagc cggaagtgg 360
gaagacgcac ctgcgggaca tgatcatcct acccgagatg gtgggcagca tgggtgggcgt 420
ctacaacggc aagaccttca accaggtgga gatcaagccc gagatgatcg gccactacct 480
gggcgagttc tccatcacct acaagcccg aaagcatggc cggcccgga tcggggccac 540
ccactcctcc cgcttcatcc ctctcaagta atggctcagc taataaaggc gcacatgact 600
ccaaaaaaaa aaaaaaaaaa angggnsggc ccggtcttaa aggatccnaa gcywacktac 660
sctgctgcaa ctctactctc tcc 683

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<210> 504

<211> 2196

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (18)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2104)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2148)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2196)

<223> n equals a,t,g, or c

<400> 504

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gcctaaactt ggggtttctg tggttcataa agttgggata trtwtttttt ttcaaatgga 180
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ccaaagattt tccccaaaga atagacattt tttcctctca tcacttctag atgcaaaaatc 300
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tccccattcc acacgatctt gagtagcaca cgttatgktc gkttcctccg aagaktggtg 420
tattwgggtc tgaragscag aggggctkkg aaagacttgt tatagtccgt ktgggaatga 480
gagaagtccg tgcagawtag taaacgggag tctgtttccc acaggtcccc tttccctgag 540
cccatctaca atagcgaggg gaagcggcctt aacacccgag agttccgcac ccgcaaaaag 600
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gatgagtacc cagaaatcaa ctttgtgggg ctgctcatcg ggcccagagg gaacaccctg 780
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gccctggtta ctgccaatc aatgggagaac gtcaaaaagg cagtggaaac gataagaaac 960
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<210> 505

<211> 949

<212> DNA

<213> Homo sapiens

<400> 505

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<210> 506

<211> 365

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (359)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (360)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (361)

<223> n equals a,t,g, or c

<400> 506

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cagatcgaat ctaacggtca ctcatatcg ttgggtcgta tggaccagta tctctaccgg 120
tactatcgcc gcgacgttga actcaaccag acgctggatc gcgaacacgc catcgagatg 180
tgcatagctg ctggctgaaa ctgctggaag tgaacaagat ccgytccggc tcacactcaa 240
aagcctctgc gggaagtccg ccatgttctt cgagatattc ggtacccaat tcgccctata 300
gtgagtcgta ttacaattca ctggccgctg ttttacaacg tcgtgactgg gaaaacgann 360
nagga 365
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<210> 507

<211> 2059

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (18)

<223> n equals a,t,g, or c

<400> 507

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catggcagaa ccgcagcccc cgtccggcgg cctcacggac gaggccgccc tcagtgtctg 180
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atgtgatttt cccattatga agttttcact ctacttcttg gcttatgagg ataaaaatga 360
catccctaaa gaaaaagatg aaaaaatagc ctgggcgctc tccagaaaag ctacacttga 420
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<210> 508

<211> 1337

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (726)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<400> 508

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cctttgtgtg aagttgacct ggtcaagggc gggcactggt ggaaggcgct gattcccagt 180
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ggttcagacc cctttgtgaa aatccagctg gtgcatggac tcaaacttgt gaaaaccaag 360
aagacgtcct tcttaagggg cacaattgat cctttctaca atgaatcctt cagcttcaaa 420

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gtaaagtgtg taactagatt atgggccatt tggagaaacc aaatggcaac caaaactatt 1260
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aacgccctgt gggatg 1337
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<210> 509

<211> 731

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (33)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (720)

<223> n equals a,t,g, or c

<400> 509

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<211> 944  
<212> DNA  
<213> Homo sapiens

<400> 510  
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<210> 511  
<211> 517  
<212> DNA  
<213> Homo sapiens

<220>  
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<222> (449)  
<223> n equals a,t,g, or c

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<210> 512  
<211> 3651  
<212> DNA  
<213> Homo sapiens

<220>

<221> misc feature  
<222> (1283)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (3641)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (3650)  
<223> n equals a,t,g, or c

<400> 512

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&lt;210&gt; 513

&lt;211&gt; 1936

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 513

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&lt;210&gt; 514

&lt;211&gt; 1177

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (24)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 514

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&lt;210&gt; 515

&lt;211&gt; 932

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<220>  
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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (880)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (911)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (912)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (921)  
<223> n equals a,t,g, or c

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<210> 516  
<211> 1159  
<212> DNA  
<213> Homo sapiens

<400> 516  
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&lt;210&gt; 517

&lt;211&gt; 2451

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 517

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<212> DNA

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<222> (913)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (926)

<223> n equals a,t,g, or c



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&lt;221&gt; misc feature

&lt;222&gt; (947)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 518

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&lt;210&gt; 519

&lt;211&gt; 3315

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 519

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<210> 520

<211> 2361

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2121)

<223> n equals a,t,g, or c

<400> 520

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<210> 521

<211> 2521

<212> DNA

<213> Homo sapiens

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<220>

<221> misc feature

<222> (2477)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2516)

<223> n equals a,t,g, or c

<400> 521

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 <223> n equals a,t,g, or c

<220>  
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 <223> n equals a,t,g, or c

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 <213> Homo sapiens

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<210> 524

<211> 1963

<212> DNA

<213> Homo sapiens

<400> 524

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<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
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<223> n equals a,t,g, or c

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<211> 2599  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (57)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (2410)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (2461)  
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2500)

<223> n equals a,t,g, or c

<400> 526

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<210> 527

<211> 1305

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1293)

<223> n equals a,t,g, or c

<400> 527

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<210> 528

<211> 1631

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1628)

<223> n equals a,t,g, or c

<400> 528

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gggggggncc c 1631

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&lt;210&gt; 529

&lt;211&gt; 1944

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (568)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 529

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<210> 530

<211> 1425

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1409)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1411)

<223> n equals a,t,g, or c

<400> 530

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<210> 531

<211> 1466

<212> DNA

<213> Homo sapiens

<400> 531

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<210> 532

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 532

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&lt;210&gt; 533

&lt;211&gt; 2857

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 533

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<211> 1335

<212> DNA

<213> Homo sapiens

<220>

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<222> (35)

<223> n equals a,t,g, or c

<220>

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<222> (1334)

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<400> 534

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&lt;210&gt; 535

&lt;211&gt; 2818

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 535

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&lt;210&gt; 536

&lt;211&gt; 1397

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 536

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<211> 1233

<212> DNA

<213> Homo sapiens

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ctaattccag acagaggagt ggctgggtcaa ntggctgatc angccgggtca gcgkgtnacg 1140  
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<210> 538  
<211> 1016  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (147)  
<223> n equals a,t,g, or c

<400> 538  
acaggtgcgt gccaccacgc ccagctaaat tttgtatttt tagtggagac ggggtttcac 60  
catgttggcc aggatggctc caatctcctg accctgcgat ctgcccacct cagcctccca 120  
aagtgcctggg attacaggcg taacacncgg gcctggcctg ttttatgatt cttaatagtt 180  
acttgggttta aatcacattt gatactatcc ttctgaaaag tctgagacag atctacaaac 240  
tacagtcaaa attatagatt aagaggaatg aatgcaccta tttggcttta agttgaagat 300  
gaattatttc tcatgctcat tttcttgctg cagttatctt agaaagaccc ccaaaggctt 360  
tgtgattgta agcactgtca tgatcacaga atgcaagctt ctggtaccat gatcctcaac 420  
ttagagagga agaaaccaag acagagagct taactcactt ctctcaggga aaattaggag 480  
ttgagcacag gacaggaaat gggctttgcc acttttagct ccaggctttt ctaaccagac 540  
ttgatttcct catgttctag aaagatcact aatgggtcaag tggaacaagc actacacgac 600  
taacccctat tgggggtttt aacttaaggg aggctaattt ttaatttaaa ctgctcgaga 660  
tatgagttct gcaaaagggtg gtccgcaccc ttggccctct ggacattatc actaaattgc 720  
ttgtgcctgt taacaagaat actgaccaga atgctcttca ttagcttat acagttggtt 780  
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ataaaaaacc actttatata aaattgctct agaagtcata tgcattgga tgcctgttg 900  
tttatggagt ttccctggaa agatgttcct tgacagatgc agccctgagt cacacacttg 960  
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<210> 539  
<211> 1679  
<212> DNA  
<213> Homo sapiens

<400> 539  
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ggcccggggg accctgctgg ccaaggaggt cgtcagtcog gtcttgtctt ccagaccccg 180  
aggaccgaag ctcccgacg acgaggaacc gcccaacatg gcctcggaga gtgggaagct 240  
ttgggggtggc cggtttgtgg gtgcagtgga ccccatcatg gagaagttca acgcgtccat 300  
tgcctacgac cggcaccttt gggaggtgga tgttcaaggc agcaaagcct acagcagggg 360  
cctggagaag gcagggtcc tcaccaaggc cgagatggac cagatactcc atggcctaga 420  
caaggtggtt gaggagtggg cccagggcac cttcaaactg aactccaatg atgaggacat 480  
ccacacagcc aatgagcgcc gcctgaagga gtcattgggt gcaacggcag ggaagctgca 540  
cacgggacgg agccggaatg accaggtggg cacagacctc aggtgtgga tgcggcagac 600  
ctgctccacg ctctcgggcc tcctctggga gtcattagg accatgggtg atcgggcaga 660  
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ggactacggg cacagtgtgg agcagtatgg tgccctgggc gcaactgcgcg ctccagcgtc 1560  
gactggcaga tccgccaggt gcgggcgcta ctgcaggcac agcaggccta ggtcctccca 1620  
cacctgcccc ctaataaagt gggcgcgaga ggaaaaaaa aaaaraaaaa aaaagttct 1679

<210> 540

<211> 1080

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (970)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (978)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1027)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1044)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1067)

<223> n equals a,t,g, or c

<400> 540

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acaacattaa tgagaggacc acctgggtgc agaagatcaa ggcggcgtct gagcagtaca 180  
tcgacaccga gaagaagaag cgtgagaaaag cttaccaagc ccgctcccaa aagacttcag 240  
gcattgggcg cctgatgggtg catgtcattg aagctacaga attaaaagcc tgcaaaccac 300  
atggaaagag caaccatac tgtgaaatca gcatgggctc ccagagctac accaccagga 360  
ccatccagga cacactcaat cccaagtggg attttaactg ccagttcttt attaaggatc 420

```

tctaccaaga cgtgctgtgt ctcaccctgt ttgacagaga ccagttttca ccagatgatt 480
tcctgggtcg tactgaaatt ccagtggcaa aaattcgaac agaacaggaa agcaaaggcc 540
ctatgacccg ccgactgctg ctgcatgagg tccccaccgg ggaggtctgg gtccgttttg 600
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caccatgcag cttcaccctt cacaaagcca tgcacgctgg gggctctgtt ttctgcaca 780
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tttcagggct ataaaaagta ttacttggga aatgagggca tcagaccacc agatgttacc 960
gytcggttgn aatgtgtnc accgtggagt kggtttgggt gacgctgtta accattccac 1020
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<210> 541
<211> 2259
<212> DNA
<213> Homo sapiens

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<220>
<221> misc feature
<222> (2213)
<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (2242)
<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (2247)
<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (2250)
<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (2253)
<223> n equals a,t,g, or c

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<400> 541
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gtggtttityt atccaaacga ccaaaaaacc aacagtaaca ccagtgaac cccacactgt 120
cgggcttata aaaatctgtg ccatcatggt gattttatcc aagactgctc cacttaccoc 180
agtgcctggg acaagtttct gttgaaactt tagatagcag aattatttgc aatttgtagc 240
atagaaaaga tttttaaatt tttttacaaa aggtttttta acagattagg gtaggtgatg 300
gtttaaatca attaagtggc attggaaacc tagggtttcc ttttgattaa gagccttttt 360
tgtttctgct ctttgtcagc tttcagggga gaaggaggcc actggaaaat tatttcccta 420
agtgcaggct gttgactgcg tatgccaaaa agggacagga ggcattggat agcagggtctg 480

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gtgacacagc tagggtcttc ctagcagctc ctccctctcc ctcccaaggc cccaggaat 540
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gggtcctgtr tcctggagta ttatgtctcc ccaccttctg cagttttctc tgaacatgta 660
tgttgcccac ggtgggagcg tggtcactgt gcagttgtgc acagatgtct ttcctttacc 720
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cccatattct tctactgcc ttaactctgg tatacaccaa aaagaaatct ttactttcct 2160
tgttttatca ttataaaaaa aaagtatttt gctagtatgg aaaaaacctt tgnatttgac 2220
gtcacctggg gtctgctggc anaaagnttn ggngaattg 2259

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<210> 542

<211> 1347

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1290)

<223> n equals a,t,g, or c

<400> 542

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agggattggg gaatttttct gtaaacactt ctaagggcaa tacagccaaa aatgggtggc 120
tgcttctcag taccaatatg aagtgggtac agttttcaaa cctacacgtt gatgttccaa 180
aggatttgac caaacctgtg gtaacaatct ctgatgaacc agacatatta tataagcgcc 240
tctcggtttt ggtgaaaggc cagcataagg ctgtattgga cagttatgaa tattttgctg 300
tgcttgctgc taaagaactt ggtatctcta ttaaagtaca tgaacctcca aggaaaatag 360
agcgatttac tcttctccaa tcagtgcata tttacaagaa gcacagagtt cagtatgaaa 420
tgagaacact ttacagatgt ttagagttag aacatctaac tggaagcaca gcagatgtct 480
acttggaata tattcagcga aacttacctg aaggggttgc catggaagta acaaagacac 540

```

aattagaaca gttaccagaa cacatcaagg agccaatctg ggaaacacta tcagaagaaa 600  
aagaagaaag caagtcataa agcctcaggg aggccatttt tgcctaaatt tgaaatgagg 660  
gtggggccaga tgagtatgtt taagtggaga gtgcttccag ctgagatgat ttgagtctgy 720  
cctaactgct ccattgagtt ctctgtccct catcagctga gggcagggaa tggaaacttta 780  
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gaactttata gagttgccta ccagggttac tgtaatggaa tttatgatct taagaaatta 1260  
ctagttgtat tatttatcct atgattcatn cattcaataa gcttttactg cataaaacttt 1320  
acattcagca ctgtagttaa gtaccca 1347

<210> 543

<211> 1901

<212> DNA

<213> Homo sapiens

<400> 543

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aggggcgtgg ttgctctcca gaccctacga aaattagttg aacttactca gaagccagtt 180  
catcagctct ttgattacat ttgtggtgta agcacagggt ccatattagc tttcatgttg 240  
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gacagtcaaa catgggaaaa cattcttaag gataggatgg gatctgcact gatgattgaa 420  
acagcaagaa accccacatg tcctaaggta gctgctgtaa gtaccatagt aaatagaggg 480  
ataacacca aagcttttgt gttcagaaac tatggtcatt ttcttggaat caactctcat 540  
tatttgggag gctgtcagta taaaatgtgg caggccatta gagcctcatc tgcgtctcca 600  
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aataaccctt cggcattagc tatgcatgag tgtaaatgtc ttggccaga tgtgccgtta 720  
gagtgcatag tatccctggg cactggacgt tatgagagt atgtgagaaa cacggtaaca 780  
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<210> 544  
 <211> 842  
 <212> DNA  
 <213> Homo sapiens

<400> 544  
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 cggccgtgcg cctgctgctt ccggggggagc tggccaagca cgccgtgtcg gagggcacca 420  
 aggccgtcac caagtacacc agttccaagt aactttgcc aaggagagac atgaagacag 480  
 aggagaaatg aatgcataaa ataactgata atatgaatct atacatagaa cttaggaagt 540  
 ctcatctgcc tgaaaatgac tgtgtggatc ccacccaaat ccaactcatc ctggtttgct 600  
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 actgggaatt cattacttgc catggactac ctttgctaag aaaagtctga atgagaagat 780  
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<210> 545  
 <211> 778  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (641)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (652)  
 <223> n equals a,t,g, or c

<400> 545  
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 accgggtcca gaccacgcg gcgccagttc tccggcgagg aggaaaaccg cgcagagagg 180  
 cagcaatgaa tgtggatcac gaggttaacc tcttagtgga ggaaattcat cgtttgggtt 240  
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 gtgccaacct ctttgaagca ttggtaggaa ctcttaaagc tgcaaaacga aggaagattg 360  
 taacatatcc aggagagctg cttctgcaag gtgttcatga tgatgttgac attatattac 420  
 tgcaagatta atgtggttta catatcttta tgtactgcc ttttttgtt ctggtaaaact 480  
 ggaatataaa gtgaaagaac aaacatttga acatacttaa tgtattttta tagaactttg 540  
 taaacgaaag gagattcatg ttttagaagt ctgtcctttt ttatatcttg aaagaaaatc 600

tatgtatgat gctataaaat aaatcctatt attttctmag natmtggttg anattctgcg 660  
 aaagcaacaw gcaaactgaa gaccaactcc tatgagaaat attatgatgt ttatgtaata 720  
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<210> 546

<211> 2142

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (32)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (225)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (619)

<223> n equals a,t,g, or c

<400> 546

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 aagtcagatc atgaagaact ttcaggctcc tccacaaatc tcgctgacca taacccttct 180  
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 caacagtgtg gcttcacctg gtacagtgtg cgatgatgat ccggataagg acaaaaaacg 360  
 ccagaagaaa agaggcattt tccccaaagt agcaacaaat atcatgagag catggctctt 420  
 ccagcatctc acacatccgt acccttccga agagcagaag aaacagttag cgcaagacac 480  
 aggacttaca attctccaag taaacaactg gtttattaat gccagaagaa gaatagtaca 540  
 gcccatgatt gaccagtcaa atcgagcagg ttttcttctt gatccttcag tgagccaagg 600  
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&lt;210&gt; 547

&lt;211&gt; 1893

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 547

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ccttttttaa aaaaaaaaaa aaaaaaaaaa aaa 1893

&lt;210&gt; 548

<211> 630  
<212> DNA  
<213> Homo sapiens

<220>  
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<222> (61)  
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<210> 549  
<211> 586  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (508)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (510)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (514)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (573)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (583)  
<223> n equals a,t,g, or c

&lt;400&gt; 549

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garccaccca cctaactact agaaaarnan cttngttcac ttaatttccc ctttaatttc 540
tttttccata aaargttaag ttaattttta agnggtgaaa ggntca 586
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&lt;210&gt; 550

&lt;211&gt; 1586

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1574)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1578)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1585)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 550

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<210> 551

<211> 2143

<212> DNA

<213> Homo sapiens

<220>

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<220>

<221> misc feature

<222> (2086)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2097)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2140)

<223> n equals a,t,g, or c

<400> 551

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gctgaggtag atgtgacccg agatattgtc agcagagaga gagtatggag gacacgaaca 360
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